

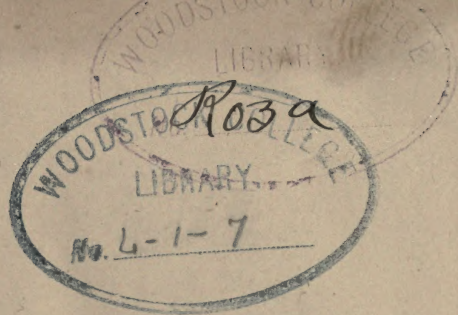


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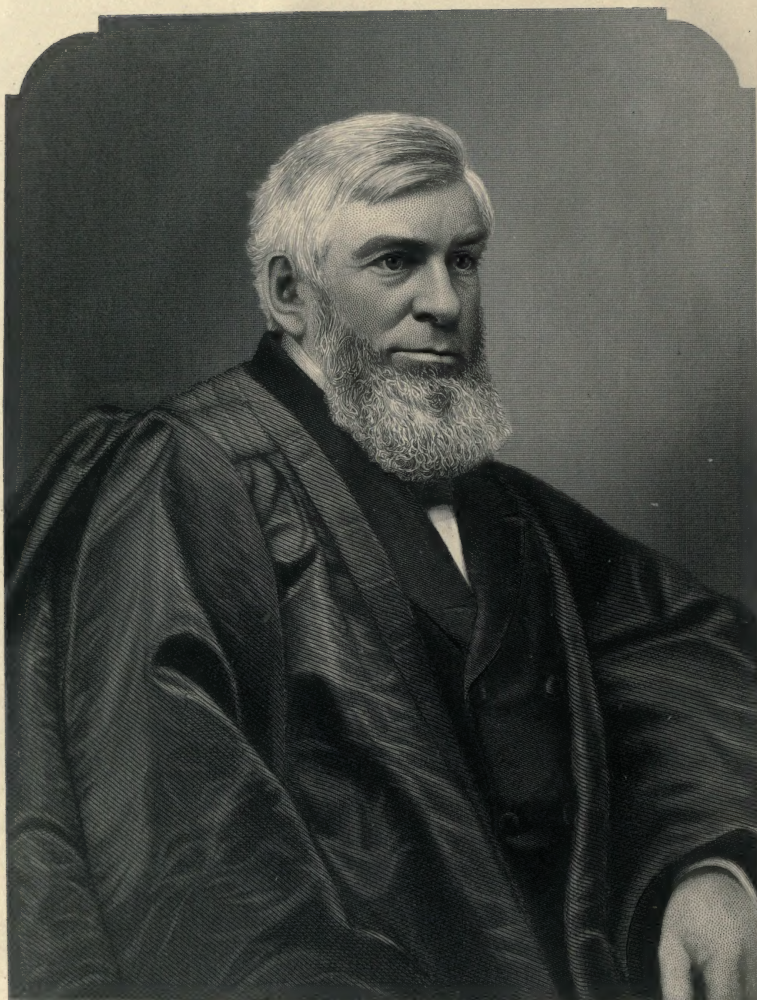












H. B. Hall, Jr.

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CHIEF JUSTICE of the UNITED STATES.



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APPLETONS'  
ANNUAL CYCLOPÆDIA

AND

REGISTER OF IMPORTANT EVENTS

OF THE YEAR

1882.



EMBRACING POLITICAL, CIVIL, MILITARY, AND SOCIAL AFFAIRS; PUBLIC DOCUMENTS; BIOGRAPHY, STATISTICS, COMMERCE, FINANCE, LITERATURE, SCIENCE, AGRICULTURE, AND MECHANICAL INDUSTRY.

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## P R E F A C E .

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THE volume of this work for 1882 is the seventh of the new series and the twenty-second of the whole series. It has grown in size to meet the rapidly increasing activity in human affairs, and to present the interesting public questions and scientific developments which have arisen, and the discussions of their principles.

A special article is devoted to each State of the United States and generally to each country of the world, which contains a sketch of its history during the year, the administration of its government, and its legislation; full and official information is given of its area, population, education, military and naval force, commerce, finances, productions, statistics, public men, and the public questions agitated, and reforms effected. No efforts are spared to secure the fullest information from all parts of the world, and it is considered that in its several departments the work may be safely consulted as the completest and most reliable book of reference. At the same time its record of progress in the various departments of science and useful practical knowledge will be found most valuable and unsurpassed.

In this volume are fully presented the details on the great question agitating the country, "The Protection of American Industry," in the "Debates of Congress"; the "Tariff Revision Commission"; an analysis of the "Manufactures of the United States"; the "Occupations of the Various Classes of Population as shown by the Census"; the revenues from taxation and the duties on imports, as shown in the "Finances of the United States," by Russel A. Bayley, of the Treasury Department, which contains results not before put in print. Also the articles "on the Commerce and Finances" of the country; the revival of "The Merchant Marine Service," with others valuable and important, bear upon the same subject.

The reports of the census, showing the marvelous strides of the country, are collated in articles on the "Cereal and Coal Products"; the "Cotton Crop and its Special Manufactures"; the "Farms and Live-Stock" of the country; the vast extent of the "Fisheries of the Coast-line States"; "Forestry and the Question of the Conservation of the Forests"; the results of the "Investigation of the Lung-Plague in Cattle"; statistics of "Education and Illiteracy," to which is added the educational measures in European nations; "Details of the Criminal Jurisprudence of the States"; the "Railroads," the "Telegraphs," and the "Telephones" of the United States; the "Indebtedness of the United States," "National," "State," "County," and "Municipal," and the "Public Debts of

the Various Countries of the World." This article is illustrated by numerous engravings, showing the relative magnitude of these debts, and by colored maps of the relative indebtedness of different sections of the country.

The "Recent Progress of the States" is fully noted, and that especially of Georgia, North Carolina, South Carolina, Tennessee, Texas, Mississippi, and Louisiana, receives particular attention in articles prepared from official and original documents by Professor W. M. Browne, of Georgia. Other subjects of a public nature are presented under "Labor Movements and Agitations"; decisions of questions of constitutional law, under "Obligation of State Contracts"; "Suits against a State"; "Railroad Taxation"; "Chinese Immigration"; the surprising "Political Revolution of the Year," with its results, is set forth under "New York" and "United States."

The stirring events in some foreign countries have been of unusual interest; as the "Irresistible British Campaign in Egypt," which is authoritatively narrated, with illustrations; the "Irish Question"; the "Clôture in England"; the "Struggle of Bismarck with the Reichstag"; the "Austrian Campaign in Herzegovina." The recent views on "Non-Intervention among Nations," in opposition to that intervention which is an endless cause of wars, and the "Disciplinary Power of Legislative Assemblies," both by the editor of the "whole series" of these volumes, discuss some most vital principles. An illustrated article on the "Navies of Europe" affords a complete understanding of their immense power, and of the principal naval question of the age—the contest between plated armor and heavy guns. The recent "Italian Experiments at Spezia" are reported with illustrations.

Of the long list of special articles and new subjects may be mentioned, "The Sanitary Control of Epidemic Diseases," illustrating the experience with the yellow fever in Texas during the year, by Dr. John B. Hamilton. It is the first formal article on the subject which has appeared in print, and will serve as a guide to municipal health in all the States and cities of the Union; the "Progress made in Electric Lighting"; the "Storage of Electric Energy"; "Sewage Disposal"; "Astronomy," by Professor Daniel Kirkwood, of Indiana; "Physiology"; "Metallurgy"; "Egyptological and Assyriological Research," its results to the present time; the "Manufacture of Oleomargarine"; "Operations in Ostrich-Farming"; the "Harvests of the World" for 1882, etc. The record of Literature and Literary Progress in this country and those of Europe is extensive as usual.

The great Engineering enterprises of the world are specially described. Articles on the great religious divisions and denominations present the religious history of the year. Biographical notices of eminent persons of all countries are included in these pages.

Fine steel portraits of Chief-Justice Waite, Sir Garnet Wolseley, the conqueror of Egypt, and Sir John A. Macdonald, the Canadian premier, illustrate the volume, together with smaller portraits of prominent men of the year, including the members of the President's Cabinet, with maps and diagrams.



# THE ANNUAL CYCLOPÆDIA.

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## A

**AGRICULTURE, DECLINE OF, IN ENGLAND.** From various sources the fact has become apparent that agriculture in England has of late years suffered a great, almost alarming decline. The whole subject is occupying the attention of the public, and numerous publications of interest have appeared, in which are investigated the various phases of this decline during the last fifteen or twenty years, and a searching inquiry is made into the state and prospects of English agriculture at the present, as well as what may reasonably be looked for in the immediate future.

**BAD SEASONS.**—The chief occasion of present suffering is the succession of bad seasons, the loss from which has been summed up in figures absolutely appalling. And further, the uneasy, restless condition of mind with masses of the people urges the search for a deeper source of the evil, e. g., in the social and legal relations between the owner and the cultivator of the land. But, without entering into that question here, it is clear that *extreme* remedies (urged by some) are to be deprecated, and the facts are fairly and calmly to be examined into, seeing that the land-owner, the farmer, and the laborer have really a common interest in every measure which will tend to draw the most produce out of the land for their own profit and the good of the whole community. "High farming" (as it is called), which implies the importation of material from without, is not found to yield any sufficient remedy. Its expense has, hardly without exception, been found to be greater than its returns. A marked improvement in the wages of domestic servants has had the effect of drawing away numbers of the daughters of laborers from field-work, and the complaint is freely made that juvenile labor is much decreased by the longer attendance at school, and the ill results of much which children learn there, in rendering them dissatisfied with house-work and farm-labor.

**AMERICAN COMPETITION.**—American competition, too, has had a most depressing effect upon agricultural interests in England. The wheat-crop in the United States has grown during the twenty years just past from twenty to sixty million quarters. Exports from America of meat, cheese, and butter have also largely increased. Some comfort, however—such as it is—may be drawn from the consideration that Manitoba, a rising and important part of the British possessions in America, promises to exceed in fertility all the wheat-growing countries in the world. During the past fourteen years it appears that the United Kingdom has obtained from abroad about one half the amount of its consumption of wheat. "It is clear," says an English writer, "that, however much we may deplore the losses from bad seasons, the extension of tillage throughout the world has not kept pace with the needs of our population; and the new railways and waterways abroad may not prove more injurious to English farmers, in the face of an increasing population, than the extension of roads in England was to the farmers of Middlesex, who petitioned Parliament, in the last century, against the opening up of remote districts which, they said, could undersell them, owing to the cheapness of their lands." Wheat growing is not regarded by good authorities as of first-rate importance in English home-farming; \* on the contrary, live-stock seems to have become the paramount interest in agriculture.

**STATISTICS.**—The London "Times" furnishes some very valuable as well as instructive statistics on this subject, especially with reference to the question of live-stock in farming. There is, it appears, a very great curtailing, almost relinquishing, of the breeding or fattening of

\* Of the whole cultivated area of the United Kingdom (about 48,000,000 acres) the grain-crops occupy only 22½ per cent (6 per cent only being wheat, 5½ barley, and 9 oats), the green crops, clover, etc., and permanent pasture occupying the remaining 77½ per cent.

animals, notwithstanding that sheep are selling for one shilling per pound in their wool, and no farmer can possibly have exchanged breeding and grazing for the cultivation of wheat. Is this prostration of husbandry, it is asked, typical of a general degradation of farmers' resources? And has the process of depletion begun only in the last few seasons, or has it been operative for a decade of years or more?

On comparing the stock of sheep in 1881 with that in 1868, a tolerably clear view is obtained of the loss during those thirteen years. There is not a single county in England without a diminution, more or less large, in the amount of sheep-stock. In England there are not three fourths as many sheep as there were in 1868, the decrease being 5,548,000. The loss for Wales is 201,000 sheep, or  $7\frac{1}{2}$  per cent; for Scotland, 381,000, or  $5\frac{1}{4}$  per cent; for Great Britain, the reduction is 6,130,000, or about 20 per cent; for Ireland, 1,564,000, or  $32\frac{1}{4}$  per cent; and for the United Kingdom, a loss of 7,712,000, or  $21\frac{3}{8}$  per cent. The augmentation of cattle-stock does not at all counterbalance this great decrease in sheep-stock. While sheep diminished in England, in thirteen years,  $26\frac{1}{2}$  per cent, cattle increased only 10 per cent, and in the United Kingdom only 9 per cent.

In the tables furnished, a comparison is instituted between cattle and sheep stock, by estimating each head of cattle as equivalent to six sheep; and in this way an approximation is made, as nearly as possible, to the true deficit with live-stock in the United Kingdom. From this it appears that the total combined cattle and sheep stock of England in 1881 was less than that of 1868 by a head of live-stock equivalent to 3,268,000 sheep, being a reduction of  $7\frac{1}{4}$  per cent. Put at £2.10 per sheep, the money loss is £8,170,000 (over \$40,000,000). The decrease for Great Britain was 5 per cent; but, owing to some increase in Wales and Ireland, it was for the United Kingdom 3 per cent. This is, it must be confessed, a rather sad position of affairs, after all the expense and toil incurred in the application of improved methods of husbandry. Another table gives the acres in the different counties under permanent pasture, as clover, grasses, green crops, etc., showing an increase of over 15 per cent in England, and over 10 per cent in the United Kingdom.\* This increase in permanent pasture has diminished a large breadth of the area devoted to wheat. Hence, while England has probably £8,000,000 less farmers' capital in live-stock, it has a further £4,000,000 loss in wheat-crops than it possessed fourteen years ago. The fact, too, is to be faced that there is now a much lighter stocking per acre in England of animal food-crops, as compared with 1868, and this is corrected to only a small extent by the reduced acreage of straw-

crops. The decline in the stock upon grass and forage crops in England is 20 per cent, in Wales 15 per cent, in Scotland 12 per cent, though in Ireland it is less than 2 per cent. Farmers, no doubt, would have multiplied their head of stock had they been able to do so; but apparently invincible obstacles stood in their way. The great drought of 1868, succeeded quickly by another hot summer in 1870, and this immediately followed by two years of great prevalence of foot-and-mouth disease, brought the herds and flocks very low, except in Wales and in Ireland, and not to such an extent in Scotland as in England. A maximum head of stock was attained in 1874 and 1875; then came a decline, partially recovered at the June census of 1879. But since then the fall in numbers has been rapid, sheep-rot and cattle-diseases having made excessive ravages, while the last three or four years' failing wheat-crops destroyed a serious proportion of the capital which would have been otherwise available for raising animal produce. The decrease in breeding, too, has been remarkable, amounting to 2,136,000 lambs less in 1881 than was bred in 1868, i. e., about 27 per cent. The increase of 116,000 calves does not compensate for the decrease of lambs, since this number of calves is equivalent only to an addition of 696,000 against a loss of 2,136,000. On a comparison of small with large holdings—that is, farms of 50 and 100 acres and less, compared with those of 1,000 and 2,000 acres—it is quite evident that large farms are favorable to preservation and development of live-stock in times of agricultural depression.

THE QUESTION.—It is a grave question which the people of the United Kingdom are called upon to consider at the present time; yet, despite unusual difficulties and trials, there does not seem to be any necessity for undue alarm, or for yielding to any despairing view, or for resorting to any desperate efforts toward obtaining remedies of existing evils. The English farmer must practice his art better and with more intelligence, if he would meet successfully foreign competition; and especially should he improve the breed of animals, and stamp out and keep out diseases hitherto imported. There is, no doubt, ample room for increasing the efficiency of farming in England, and judicious legislation, particularly in improving the outfall of rivers and preventing floods, will materially further this desirable end. In addition, the frank interchange of views, and comparison of interests and advantages between landlords and tenants (a beginning of which has already happily been made), will greatly aid in reaching the much-wished-for result. The Duke of Argyll expresses his "perfect confidence in the prospects of British agriculture, provided those who conduct it are left to do so in the perfect freedom which is the fundamental condition of improvement and of success in all industrial occupations"; and an able English writer expresses himself in

\* Rather more than half the cultivated acres of the United Kingdom (say about 25,000,000) are in permanent pasture, besides the mountain-lands. In Great Britain, out of 32,211,000 acres in cultivation, nearly 15,000,000 are in permanent pasture, besides the mountain-lands.



words worth quoting in conclusion: "Farmers would be ill advised if they allowed the pressure of present difficulties to tempt them to dabble in revolutionary remedies, and, instead of putting their shoulders to the wheel, to invoke the political Hercules of the day as one who has an unbounded power to reform all ills."

**FURTHER STATISTICS.**—It may be added here, from later sources, that the summary of agricultural returns of Great Britain for 1882 gives further evidence of the severe blow which a seven years' cycle of bad seasons has inflicted upon English agriculture. The area of wheat-culture has somewhat increased, but probably to no profit; and there is a decrease in the number of cattle and sheep. The picture as a whole is gloomy; and the one that in the minds of those interested in the matter is, how best to increase the live-stock in English home farming.

**ALABAMA. STATE GOVERNMENT.**—The State officers during the year were as follows:

Governor, Rufus W. Cobb, (Democrat); Secretary of State, W. W. Screws; Treasurer, I. H. Vincent; Auditor, J. M. Carmichael; Attorney-General, H. C. Tompkins; Adjutant-General, J. F. White; Superintendent of Education, H. C. Armstrong; State Librarian, J. M. Riggs. Judiciary: Chief-Justice of Supreme Court, Robert C. Brickell; Associate Justices, George W. Stone and H. M. Somerville.

**LEGISLATURE.**—The Legislature met on the 14th of November. On the 28th John T. Morgan was re-elected United States Senator by 29 votes to 2 for Paul L. Jones in the Senate, and 84 to 10 for Jones in the House. Morgan was supported by the Democrats and Jones by the Republicans and Greenbackers. On December 1st Governor O'Neal was inaugurated. No important legislation had been perfected before the close of the year.

**STATISTICS.**—The following is a summary of receipts and disbursements for each year from 1874 to 1882:

	1874-'75.	1875-'76.	1876-'77.	1877-'78.	1878-'79.	1879-'80.	1880-'81.	1881-'82.
<b>AUDITOR'S REPORTS.</b>								
Cash balance beginning of year	\$76,442 99	\$48,478 19	\$91,569 49	\$190,557 64	\$260,688 77	\$266,576 09	\$358,528 28	\$444,110 85
Receipts from all sources....	728,870 22	928,169 80	979,592 21	942,998 61	981,289 16	980,601 25	964,741 78	1,012,547 01
Expenditures on all accounts.....	1,061,349 02	880,078 00	880,604 06	872,867 48	927,838 08	844,649 09	874,174 61	918,588 61
Cash balance at close of year	43,478 19	91,569 49	190,567 64	260,688 77	266,576 09	358,528 28	444,110 85	588,068 75
<b>TREASURER'S REPORTS.</b>								
Actual cash at close of year..	\$51,574 19	\$100,068 84	\$198,787 58	\$265,620 85	\$267,051 75	\$358,588 75	\$444,111 07	\$588,188 68

Governor Cobb, in his message to the Legislature, says:

I recommend a further reduction of the tax-rate. In two years the balance in the Treasury has been more than doubled, and is now entirely too large. Taxes should be collected only as they are needed, and to the extent they are needed, for the proper purposes of economical administration.

The debt settlement provided for by the act of February 23, 1876, has been practically completed. There yet remain outstanding a few of the old bonds for which provision is made. As they come in, new bonds, bearing interest from the date of issue, are exchanged for them. It is probable the most of those still out are lost or destroyed. In two years, but \$146,300 of the new bonds, of all classes, have been issued. The total bonded debt, including \$253,500 of eight per centum bonds held by the Agricultural and Mechanical College, is now \$9,407,800, on which the interest charge is \$343,929. There will be no further increase in the rate of interest on any class of bonds until January, 1887, when class A bonds will advance to four per centum. The valuation of property for taxation has been for six years as follows: 1876, \$135,535,792; 1877, \$130,799,138; 1878, \$126,773,262; 1879, \$123,757,072; 1880, \$139,077,328; and 1881, \$182,920,115. So far as the abstracts have been received for 1882, they indicate a still larger aggregate.

The scholastic year ends September 30th, but the reports of the Superintendent of Education are often delayed for reports from county superintendents. The report for 1880-'81 was

not made until the middle of February, 1882, and the report for 1881-'82 was not made during the year. The total revenue of the school department for 1880-'81 was \$397,479.04, derived from the following sources: Interest on sixteenth section fund, \$105,424.49; interest on valueless sixteenth section fund, \$5,825.47; interest on United States surplus revenue fund, \$26,763.47; escheats to the State, \$160.83; annual appropriation, \$130,000; unapportioned balance from 1880, \$1,092.45; and poll-tax collected and retained in the counties, \$128,212.33. This was apportioned as follows: to counties and cities, including the poll-tax, \$382,552.52; to the normal schools, \$13,500; educational contingent fund, \$1,000; unapportioned, \$426.52. The expenditures of the fund were as follows: Paid to teachers of white schools, \$225,867.77; to teachers of colored schools, \$158,901.85; salaries of county and city superintendents, \$11,883.80; normal schools, \$13,500; and contingent expenses, \$535.65. The total number of children within the school ages enumerated was 88,003, of which 217,590 were whites and 170,413 were colored. The total number of children enrolled was 176,289, of which 107,338 were whites and 68,951 were colored. The daily average attendance in the white schools was 66,840, and in the colored schools 48,476. There were 4,572 schools taught during the year, of which 2,981 were white schools and 1,591 were colored schools. The total number of teachers was 4,698, of whom 3,053 were in the white schools and 1,645 were in the colored schools. The average length of time taught in

the white schools was 84 days and in the colored schools 76 days. The average monthly pay of teachers in the white schools was \$22.98 and in the colored schools was \$23.15. It is not likely that there will be any very large variations from these statistics in the report for 1881-'82.

From October, 1880, to October, 1882, there were 75 pupils in the Deaf and Dumb and the Blind Asylum at Talladega, of whom 14 were discharged, leaving at the latter date 61 in the institution, of whom 40 were mutes and 21 were blind.

On September 30, 1880, there were 402 patients in the Hospital for the Insane, of whom 213 were men and 189 were women. During the two years ending September 30, 1882, 188 patients were discharged, 57 died, and 260 were admitted, leaving under treatment 417 patients, of whom 209 were men and 208 were women. Of these, 345 were white and 72 were colored. The causes of death were as follows: Apoplexy, 2; Bright's disease, 2; cerebral softening, 1; cerebral congestion, 2; diarrhoea, 1; epilepsy, 3; fracture of skull, 1; heart-disease, 2; maniacal exhaustion, 9; marasmus, 11; paresis, 6; pericarditis, 1; peritonitis, 1; phthisis, 11; pneumonia, 3; and syphilis, 1. Of the discharges, 126 had recovered, 49 were improved, and 13 were unchanged. In the two years, 155 applications for admission were refused for want of room. From the opening of the hospital in July, 1861, to the date of the last report, 1,895 patients had been admitted into it, of whom 671 had been discharged recovered, 211 discharged improved, 84 discharged unchanged, and 452 had died. The cost of maintaining the hospital for the two years was \$140,003.50, of which \$13,729.41 was for improvements and repairs. An extension to the hospital building is in course of construction.

The effective militia of Alabama consists of two regiments and a few unattached companies, uniformed at their own expense, and armed and equipped by the State. These organizations are numerically weak, numbering in all less than one thousand men, and they are not all as well drilled and disciplined as they should be.

The Governor comments unfavorably upon one feature of the penal law, as follows:

Hard labor for the county, as an alternative for imprisonment in the penitentiary, is peculiar to Alabama. It is unknown in other States. It confounds misdemeanors and felonies. It unequally punishes offenders. The felon in the penitentiary escapes the severer punishment of hard labor for the county, which must be inflicted upon the misdemeanant. The convict to the penitentiary has the benefit of State inspection, which gives him some protection while serving out his sentence, and secures his discharge at its expiration. The convict to hard labor for the county is generally hired to work outside of the county, is subjected to penitentiary discipline, is beyond the care of those who should see that he is humanely treated, and has no assurance of discharge at the expiration of his sentence.

The following is the record of the Alabama Penitentiary for recent years:

YEARS.	Average prison population.	Whites.	Blacks.	Deaths, whites.	Deaths, blacks.	Total.
1875.....	350	60	290	2	21	23
1876.....	500	55	445	5	18	23
1877.....	600	60	540	4	41	45
1878.....	680	74	606	..	16	16
1879.....	660	77	583	5	18	18
1880.....	600	74	526	5	37	42

In 1872 only 10,000 tons of coal were mined in Alabama. In 1879 were mined 290,000 tons; in 1880, 340,000 tons; in 1881, 400,000 tons.

According to the census of 1880, the State produced 699,654 bales of cotton, 25,451,273 bushels of corn, 3,039,639 of oats, and 1,529,657 of wheat.

The following is the cotton statement of the port of Mobile, August 31, 1882:

	Bales.	Bales.
Stock on hand September 1, 1881.....	.....	4,281
Received this year.....	263,619	
Corrections.....	1,399	
Wagon-cotton.....	22—	265,040
Received from Pensacola.....	.....	2,096
Total.....	.....	271,417
Exports to Great Britain.....	86,322	
“ France.....	6,313	
“ other foreign ports.....	3,231	
“ United States ports.....	223,755	
Local consumption.....	1,099—	271,220
Stock on hand this day.....	.....	197
Net receipts for the year.....	.....	265,040

#### PROPORTION OF COTTON RECEIPTS AT MOBILE.

By rivers and railroads.	1881-'82.	1880-'81.	1879-'80.
Alabama River.....	31,969	46,848	46,842
Tombigbee River.....	45,101	67,387	77,228
Black Warrior River.....	9,545	15,665	15,479
Mobile and Ohio Railroad.....	119,723	162,723	177,866
Mobile and Montgomery Railroad.....	57,261	97,563	40,674
Mobile and Alabama Grand Trunk Railroad.....	.....	.....	.....
Totals.....	263,619	390,186	357,089
Wagon-cotton, etc.....	1,421	2,133	1,882
Total for the year.....	265,040	392,319	358,971

#### WEIGHT AND VALUE OF COTTON EXPORTS TO FOREIGN PORTS FROM MOBILE FOR THREE YEARS.

	1881-'82.	1880-'81.	1879-'80.
Total exports.....	46,366	116,268	111,687
Total weight.....	22,936,333	58,693,850	56,948,064
Total value.....	\$2,547,911 70	\$5,657,357 58	\$6,395,197 62
Average weight per bale.....	494.85	504.85	509.55
Average value per bale.....	\$54 95	\$48 66	\$57 26
Average value per pound.....	11.11c.	9.64c.	11.28c.

By means of the improvement of Mobile Bay which has just been completed by the United States Government, a vessel drawing twenty-three feet may now enter the lower bay and find secure anchorage, and a vessel drawing seventeen feet may pass from the lower bay direct to the wharves of the city.

The following table gives the population by counties, distinguished as white and colored, according to the census of 1880:



COUNTIES.	POPULATION.			COUNTIES.	POPULATION.		
	Total.	White.	Colored.		Total.	White.	Colored.
Antauga	18,108	4,897	8,710	Henry	18,761	11,994	6,767
Baldwin	8,603	4,890	8,675	Jackson	25,114	21,074	4,038
Barbour	38,979	18,091	20,884	Jefferson	23,272	18,219	5,053
Bibb	9,457	5,887	8,600	Lamar <sup>1</sup>	12,142	9,967	2,173
Blount <sup>1</sup>	15,869	14,210	1,159	Lauderdale	21,035	14,173	6,860
Bullock <sup>2</sup>	29,066	6,944	22,119	Lawrence	21,392	12,642	8,750
Butler	19,649	10,684	8,965	Lee	27,262	12,217	15,041
Calhoun <sup>3</sup>	19,591	14,134	5,457	Limestone	21,600	11,637	9,963
Chambers	23,440	11,364	12,075	Lowndes	81,176	5,645	25,528
Cherokee	19,103	16,418	2,690	Macon	17,371	4,587	12,784
Chilton <sup>4</sup>	10,793	8,651	2,142	Madison	37,625	18,591	19,034
Choctaw	15,731	7,390	8,341	Marengo	30,890	7,277	23,612
Clarke	17,906	7,718	10,056	Marion	9,864	8,841	520
Clay <sup>5</sup>	12,938	11,870	1,068	Marshall <sup>10</sup>	14,585	13,084	1,496
Cleburne	10,976	10,305	668	Mobile	42,653	27,187	21,443
Coffee	8,119	6,831	1,238	Monroe	17,091	7,790	9,294
Colbert	16,133	9,203	6,930	Montgomery <sup>11</sup>	52,356	13,457	38,899
Concuch	12,605	6,224	6,380	Morgan <sup>12</sup>	16,423	11,758	4,670
Coosa	15,113	10,050	5,059	Perry	30,741	7,150	23,591
Covington	5,689	4,968	671	Pickens	21,479	9,132	12,347
Crenshaw	11,726	9,118	2,608	Pike	20,640	14,868	6,272
Cullman <sup>6</sup>	6,355	6,312	43	Randolph	16,575	13,155	3,420
Dale	12,677	10,553	2,122	Russell	24,387	6,182	18,655
Dallas <sup>7</sup>	48,433	8,425	40,007	St. Clair	14,462	11,621	2,834
De Kalb	12,675	11,998	682	Shelby	17,236	12,253	4,983
Elmore <sup>8</sup>	17,502	8,747	8,755	Sumter	28,728	6,451	22,277
Escambia	5,719	4,106	1,590	Talladega <sup>13</sup>	23,860	10,856	12,504
Etowah	15,393	12,896	2,502	Tallapoosa	23,401	16,108	7,293
Fayette	10,135	8,873	1,262	Tuscaloosa	24,957	15,216	9,741
Franklin	9,155	8,079	1,076	Walker	9,479	8,978	501
Geneva	4,842	3,829	513	Washington	4,538	2,807	1,729
Greene	21,931	8,765	13,165	Wilcox	81,828	6,711	25,117
Hale	26,553	4,908	21,650	Winston <sup>14</sup>	4,253	4,236	17
The State					1,262,505	662,185	600,103

<sup>1</sup> In 1877, part to Cullman.

<sup>2</sup> In 1877, part from Montgomery.

<sup>3</sup> In 1858 name changed from Benton to Calhoun.

<sup>4</sup> Since 1870 name changed from Baker to Chilton; in 1875, part from Dallas.

<sup>5</sup> In 1877, part to Talladega.

<sup>6</sup> In 1877, from parts of Blount, Marshall, Morgan and Winston.

<sup>7</sup> In 1875, part to Chilton.

<sup>8</sup> In 1877, part from Montgomery.

<sup>9</sup> Since 1870, name changed from Sanford to Lamar.

<sup>10</sup> In 1877, part to Cullman.

<sup>11</sup> In 1877, parts to Bullock and Elmore.

<sup>12</sup> In 1821 name changed from Cataco to Morgan; in 1877, part to Cullman.

<sup>13</sup> In 1877, part from Clay.

<sup>14</sup> In 1850 name changed from Hancock to Winston; in 1877, part to Cullman.

Included in the total are 4 Chinese and 213 Indians. There were living in the United States 1,319,189 persons born in Alabama (708,904 white and 610,285 colored). Of the total population 622,629 were males and 639,876 females, 1,252,771 native and 9,734 foreign born. Of persons ten years of age and upward, 370,279, or 43·5 per cent, could not read, and 433,447, or 50·9 per cent, could not write. Of the latter, 111,040 were native whites, being 25 per cent of that class, and 321,680 were colored, being 80·6 per cent of that class. There were 141,461 white and 118,423 colored males twenty-one years of age and over. The number of horses on farms was 113,950; mules and asses, 121,081; working oxen, 75,534; milch-cows, 271,443; other cattle, 404,213; sheep, 347,538; swine, 1,252,462; manufacturing establishments, 2,070; capital, \$9,668,008; hands, 10,019; value of materials used, \$8,470,205; products, \$13,565,504.

**POLITICAL CONVENTIONS.**—The Democratic State Convention met in Montgomery on the 7th of June, and on the second day nominated the following ticket:

For Governor, Edward A. O'Neal, of Lauderdale; for Secretary of State, Ellis Phelan, of Jefferson; for Attorney-General, Henry C. Tompkins, of Montgomery; for Treasurer, Isaac H. Vincent, of Chambers; for Auditor,

Jesse M. Carmichael, of Dale; for Superintendent of Education, Henry C. Armstrong, of Macon.

The following is the platform adopted:

*Resolved*, by the Democratic and Conservative party of Alabama, in convention assembled:

1. That we re-affirm our devotion to the time-honored principles of the Democratic party; a strict construction of the Federal Constitution, obedience to the laws of the General Government within its constitutional limits, and maintain the right of the State to regulate its local affairs by its own authority.

2. We are unalterably opposed to the continued acts of the Federal authorities tending to centralization of all power in the General Government, to the destruction of local self-government.

3. We present the record of the administration of the State's affairs while in the control of the Democratic party as an earnest of the fidelity of the party to the principles of economy and good government. We invite immigration and capital to our State, and pledge full and perfect protection to all such as may come among us.

4. That public education should be fostered and encouraged by the State as far as the means of the State will allow, having at the same time due regard to the preservation of the public credit.

5. We recognize the necessity of protecting and preserving the purity of the ballot-box as the safeguard of free institutions, and condemn any attempt to interfere with the free and full exercise of the elective franchise.

The nominee for Governor was born in Madison County in 1818. He was a general in the

Confederate army. In 1841 he was elected solicitor of his circuit; in 1875 he was a member of the Constitutional Convention, and in 1880 one of the Hancock electors from the State at large.

The Independent-Greenback State Convention met in Birmingham on the 5th of July, and nominated the following ticket:

For Governor, James L. Sheffield, of Marshall; for Secretary of State, A. H. Townsend, of Butler; for Attorney-General, Paul L. Jones, of Madison; for Treasurer, John W. Montgomery, of Jefferson; for Auditor, John B. Shields, of Walker; for Superintendent of Education, Dr. Ira G. Wood, of Jackson.

On the 6th the Republican State Convention met in Montgomery, and indorsed the above ticket; but Charles P. Lane, of Limestone County, was subsequently substituted for Mr. Jones. The following platform was adopted, which is substantially that of the Birmingham Convention:

*Be it resolved*, by the Republicans of Alabama in convention assembled:

1. That we favor such amendment or revision of the present election law of Alabama as will give each voter of the State assurance that his ballot will be counted as cast, and that the real result of every election will be honestly declared, and will remove the existing inspectors and other officers of election, and render it impossible to defeat the will of the majority by making fraudulent returns.

2. That, while demanding that adequate punishment shall be meted out to every violator of the law, we favor such changes in the convict system—both State and county—as will at least tend to reform as well as punish criminals, to humanize rather than brutalize them, and also such other changes as will put an end to the conflict now existing, in some portions of the mineral districts of our State, between cheap convict-labor and the working-man.

3. That we favor a liberal support to the free schools of the State, and an enactment of such laws as will foster and cherish our school system.

4. That we favor the enactment of such laws as will not only invite, but make it to the interest of, immigrants to seek homes in Alabama.

5. That we favor, as far as the same may be practicable under our organic law, the encouragement and protection of manufactories of all kinds in our State for such time as may be necessary to secure their permanent establishment. This we favor, believing that the prosperity of all the people depends largely upon it.

6. That we favor and heartily approve the protection of all home industries by the Federal Government, and we recognize in the principle "protection for protection's sake" the wisdom that cherishes its own, and in its application by the National Republican party in its administration of the government we recognize the statesmanship that favors the laboring man of the nation by enlarging and increasing the demand for labor; and at the same time taking from their shoulders the burden of taxation and placing it on the wealthy.

A State Temperance Convention was held in Montgomery on the 21st and 22d days of November, which agreed to ask of the Legislature certain amendments and new laws looking to the restriction of the liquor-trade.

**ELECTION RETURNS.**—The election in August resulted in the choice of the Democratic ticket. The aggregate vote was as follows: For Gov-

ernor, Edward A. O'Neal, 100,591; James L. Sheffield, 46,386. For Secretary of State, Ellis Phelan, 103,153; A. H. Townsend, 44,798. For Treasurer, Isaac H. Vincent, 102,780; J. W. Montgomery, 43,639. For Auditor, Jesse M. Carmichael, 100,968; J. B. Shields, 45,053. For Attorney-General, H. C. Tompkins, 103,562; C. P. Lane, 44,605; Paul Jones, 20. I. H. Vincent received 1,031 for Auditor intended for Treasurer. J. M. Carmichael received 1,041 for Treasurer, and Jas. M. Carmichael 2,247 for Auditor; all intended for Jesse M. Carmichael. For Superintendent of Education the vote was: Armstrong, 104,170; Wood, 47,133. The Legislature stands as follows: Senate, 31 Democrats and 2 opposition; House, 79 regular and 7 independent Democrats, and 14 opposition. Democrats were elected to Congress in November in each of the eight districts.

#### ALASKA AND ITS FUR-SEAL INDUSTRY.

The population of Alaska Territory is given by the census of 1880, by districts, as follows: Yukon Division, 7,000; Interior Division, 2,226; Kuskokwim, 3,654; Bristol Bay, 4,340; Kadiak, 2,606; Kenai, 984; Belkovsky, 669; Oonalaska, 1,392; islands in Behring Sea, 1,290; Prince William Sound, 500; Southeastern Alaska, 6,725; total, 31,386, of whom about 18,000 are supposed to be Esquimaux or Innuits. In addition to these, who represent the regular population, are about 1,500 whites, mostly traders and miners, in Southeastern Alaska. The Aleutian population and a part of the Innuits were civilized under the Russian domination, and live after the European style; of these, some 8,000 or 9,000 are attached to the Russian Greek Church.

Recent surveys show that the country is much more important, and its resources are more extensive, than had been supposed. Its area (580,107 square miles) is equal to that of all the United States east of the Mississippi River, and north of Georgia and the Carolinas. It measures 1,400 miles in direct line from north to south, and 2,200 miles from its eastern boundary to the end of the Aleutian Islands, and has a total of 25,000 miles of coast-lines. The total area of its islands is 31,205 square miles. Its principal river, the Yukon, may be ranked among the largest rivers in the United States, being seventy miles wide across its five mouths and the intervening deltas, and from one to five miles wide for the first thousand miles of its course. It is known to be navigable for 1,500 miles, and is believed by Mr. Robert Campbell, of the Hudson Bay Company, who has explored the streams, to be, with its tributary, the Pelly, navigable, when full, for nearly 3,000 miles. The land abounds in fur-bearing animals; the seas yield fur-bearing seals and otters, and fish in many varieties and immense quantities. Three thousand tons of codfish were caught on the banks off the Shumagin Islands, during 1879, for houses in San Francisco. Salmon-



canneries have been established near Sitka, at Klawak, and at Kasaan Bay. The southeastern section of the Territory is densely covered with forests of yellow-cedar, white-spruce, and balsam-fir. Coal has been found at different places along the coast; petroleum near the Bay of Katmai and on Copper River; copper abundantly on Copper River and at Kasaan Bay; lead on Whale Bay and in Kadiak Island; iron and graphite in many places; marble and sulphur in large quantities; bismuth on Vostovia Mountain; and kaolin, fire-clay, gypsum, amethysts, zeolites, garnets, agates, carnelians, and fossil-ivory are also found. Gold-mines, both placer and quartz, were opened during 1881 on Gastineaux Channel, opposite Douglas Island,

when the Board of Home Missions of the Presbyterian Church in the United States of America began to establish schools. That board has now five schools in the Alexandria Archipelago (including Sitka and Port Wrangell), in all of which the English language is taught. These schools, with two which are supported by the Alaska Commercial Company on the Seal Islands, and the two Russian schools already mentioned, represent all the facilities for education existing in this vast Territory.

An exploring expedition left San Francisco for Alaska during the summer, under the direction of Mr. Edward Schieffelin, who purposed to ascend the Yukon River as far as possible. He took with him a stern-wheel steamer and three



and yielded more than \$30,000 during the first summer. Gold is supposed to exist in many other places; and the Cassiar mines of British Columbia, which are near the Territory, probably extend into it.

Sitka, the capital of the Territory, is the port of Alaska most familiarly known to Americans of the States, but is really, according to Mr. Henry W. Elliot, of the United States Commission of Fish and Fisheries, inferior in importance to several other places. "Kadiak, Oonga, Belkovsky, and Oonalaska," says this author, in his "Monograph of the Seal Islands of Alaska," "each has a greater population than has Sitka to-day, and each has a hundred-fold more importance as a trade-center."

A considerable number of schools were established by the Russians while they held Alaska, both on the main-land and on the islands. When the Territory passed under the control of the United States they were all discontinued, except one at Oonalaska and one at Belkovsky; and education was neglected until 1877,

companions, and expected to spend a year in his cruise.

**FUR-SEALS.**—One of the most important business industries of Alaska is connected with the capture of the fur-seal (*Callorhinus ursinus*) at the Pribylov Islands, and the trade in its furs, which are under the exclusive control of the Alaska Commercial Company. The fur-seals, particularly as represented by the southern species (*Arctocephalus Australis*), were formerly numerous and widely distributed, frequenting the islands of the coast of South America and of the Southern and Antarctic Oceans; but they have been nearly exterminated by reckless hunting, and now only a comparatively insignificant part of the world's supply is drawn from these sources. In the northern hemisphere they are not represented in the Atlantic Ocean at all, and in the Pacific Ocean only at two localities, the Pribylov Islands St. Paul and St. George, Alaska, and Behring and Copper Islands, of the Commander Group, which are under Russian jurisdiction. The world's supply

of seal-furs is principally derived from the former locality, where the seal population is, by wise management, kept up unimpaired.

The Pribylov Islands lie in the heart of Behring Sea, 192 miles north of Oonalaska, 1,400 miles west-northwest from Sitka, and 2,250 miles west-northwest from San Francisco. They include the Islands of St. Paul and St. George, which lie from twenty-seven to thirty miles apart, and of which St. George lies southeastward of St. Paul. The Island of St. Paul, the larger of the two, has an area of about 33 square miles, or 21,120 acres, and 42 miles of shore-line, of which  $16\frac{1}{2}$  miles are "hauled" over by fur-seals. St. George has an area of about 27 square miles and 29 miles of coast-line, of which  $2\frac{1}{2}$  miles only are visited by the seals. The islands are inhabited by 390 Aleuts (298 on St. Paul and 92 on St. George), who dwell in comfortable houses in the villages of their respective islands, and are employed in killing the seals.

The fur-seal, which resorts to these islands to breed and shed its hair and fur, is the highest organized of all the animals of the order (*Pinnipedia*) to which it belongs, and exhibits an instinct of an extraordinarily high order. It is distinguished from the hair-seal (*Phoca vitulina*), with which it has not even a generic affinity, by its erect habit and black or ochre-colored body. The male, or "bull," when fully grown, measures between six and a half and seven and a half feet in length, and will weigh between four hundred and six hundred pounds. The head appears disproportionately small in comparison with the thick neck and shoulders, but is nearly all occupied by the brain; the eyes are bluish hazel, with a changing expression; the muzzle and jaws are of about the same size and form as those of a Newfoundland dog, but with firmly lined and compressed lips; it has a long, yellowish-white and gray mustache; and it carries its head about three feet from the ground. The females, or "cow-seals," are between four and four and one half feet in length, are much more shapely in their proportions than the bulls, and have handsome heads and eyes, and an expression of considerable intelligence. They resort to the islands for the purpose of giving birth to their young, reaching there at the end of their period of gestation, and generally within a day or two of their time of delivery. The selection of the Pribylov Islands for resort is determined by the peculiar adaptation of the beaches to the habits and comfort of the animals during the breeding-season. The shores present, at the places selected for the "hauling" and breeding-grounds, gentle slopes of shingle or a firm, well-drained surface, to which the seals can travel without discomfort, and where they can lie without annoyance from mud or sand, from May till October, every year, in perfect physical health and security.

The "bull-seals" seek the islands considerably earlier in the season than the cow-seals,

the first arrivals taking place early in May, and the great body reaching the grounds about the first of June, while the females do not come up till three weeks or a month later than the latter time. Each bull selects a spot about six or eight feet square, which he defends as his own against all rivals, and to which he invites the females when they have come to the shore, till he has collected a "harem" of fifteen or more cows around him. The breeding-season is at its height from the 10th to the 15th of July in every year, after which it subsides at the end of that month and in August. It is also established that the breeding is confined entirely to the land, and that it is never effected in the sea; the females bear their first young, a single pup each, when they are three years old, after about twelve months of gestation. The animals begin to scatter from the definite limits of their breeding-places about the 25th of July, and the "rookeries" are entirely broken up after the middle of September, when the "pups" have all learned to swim. By far the largest number of the male seals, including those which are not yet six years old, fail in the competition to establish themselves on the breeding-grounds and to secure harems of females. They are called "bachelor-seals," or, in Russian, "holluschickie," and are allotted distinct grounds, called "hauling-grounds," after the seal's peculiar mode of progression. The hauling-grounds, with the passages leading to them through the breeding-grounds, are definitely marked off, and the boundaries are strictly respected by both the breeding and the bachelor seals. The bachelor-seals are the particular objects of the chase which is conducted on the islands. The hunting-season nearly corresponds with the breeding-season, the greater proportion of the work being done in June and July. The process of hunting is rather one of driving the animals from the "hauling-grounds" to the "killing-grounds," as domestic animals are driven, for the seals are quite tame and obey the commands of their drivers with docility. Only, care has to be taken to avoid over-driving and heating them, which destroy the quality of the fur. The killing is done by the native inhabitants of the islands, who, armed with clubs about five or six feet in length and three inches in diameter (which are made in New London for the purpose), and knives, knock them on the head, stab them to the heart, and skin them speedily, before a peculiar reaction, which they call "heating," has had time to set in. The skins, which weigh from five and a half to twelve pounds each, according to the age of the animal, are salted, and piled, "hair to fat," in bins, whence, after having lain two or three weeks, till they are "pickled," they may be taken out at any time and rolled into bundles of two skins each, with the hairy side out, ready for shipment.

The business of hunting the seals and curing the skins is, by act of Congress, a monopoly of the Alaska Commercial Company of San Fran-



cisco. This company was organized by Mr. H. M. Hutchinson and Captain Ebenezer Morgan, who were the first persons to visit the islands in search of seals (in 1868) after they had passed into the possession of the United States. They perceived what the islands could be made to yield permanently under proper regulations, and also that the seals would be speedily exterminated if such regulations were not adopted. They accordingly procured an order from the Treasury Department declaring the islands a governmental reservation, and afterward an act of Congress for the protection of the fur-bearing animals on the islands. This act limits the time when the seals may be killed to the months of June, July, September, and October in each year; prohibits killing by fire-arms, or any other means that will tend to drive the seals away, as well as the killing of female seals or of any seals less than one year old; and the killing of any seals in the waters or "on the beaches, cliffs, or rocks where they haul up from the sea to remain"; limits the number that may be killed to 100,000 in each year, besides what the natives may require for their food; and provides for the leasing of the exclusive privilege of killing the seals for the term of twenty years. The lease was awarded to the Alaska Commercial Company, whose charter, rules, and regulations have been framed to accord with the provisions of the law. Practically the company does not allow more than 99,850 seals to be taken on its account in a single year. The natives use 5,000 or 6,000 more. The company employs a fleet of four steamers and a dozen or fifteen sailing-vessels, and gives its principal attention to the seal-islands, while it has also stations scattered over the Aleutian Islands and that part of Alaska west and north of Kadiak. Outside of the seal-islands, all trade in Alaska is open to the public.

The whole number of breeding-seals and their young on the two islands was calculated from actual survey in the season of 1873 to be 3,193,420. This enormous aggregate is entirely exclusive of the great numbers of non-breeding seals, to which the killing is confined, which are never permitted to come to the breeding-grounds. The animals of the latter class are nearly equal in number to the adult breeding-seals, and may therefore be counted at at least 1,500,000; so that the grand total of the fur-seal life on the Pribylov Islands is represented by more than 4,700,000 individuals.

The theoretical value of the interests of the Government on the islands, measuring it by the value of 2,500,000 or 3,000,000 adult fur-seals, male and female, in good condition, is estimated by Mr. Henry W. Elliot, of the United States Commission of Fish and Fisheries, to be not less than \$10,000,000 or \$12,000,000; taking, however, the females out of the question and from the calculation, and including the "holuschickie" alone, as they really represent the only killable seals, then the commercial value

of the same would be expressed by the sum of \$1,800,000 to \$2,000,000—a sum which stands as a permanent principal in the islands, and returns the public Treasury upward of \$317,000, or more than 15 per cent, annually.

In answer to the question, which has been frequently asked him—whether the seals are not in danger of being exterminated at the present rate of killing them—Mr. Elliot says that, provided matters are conducted on the islands in the future as they are to-day, and no plague or abnormal causes of destruction arise, one hundred thousand seals under the age of five years, and more than one year old, may be safely taken every year, without the slightest injury to the birth-rates or regular increase. This assertion is based on the estimate that about a million "pups," or young seals, are born on the islands every year, of which about one half, or 500,000, are males. These animals reach the sea, having suffered a loss of not more than one per cent, but are there exposed to destruction by various agencies, in consequence of which not more than half of them, or 250,000 males, return in the following year. After that time the causes of destruction are less extensively operative, and 225,000 out of the original 500,000 male young, with as many females, may be expected to live out the ordinary terms of their natural lives. Not more than one in fifteen of the males born is needed for breeding purposes in the future; but, even if one fifth of them are reserved, there are still left 180,000 animals that might be safely killed every year. Mr. Elliot further states his belief that it is not possible by any management materially to increase the production of the islands. The total number of skins taken—from 1797 to 1880—is computed, from the best data that can be obtained, at 3,561,051. The Alaska Commercial Company paid into the Treasury of the United States, from July, 1870, to August, 1881, in taxes and rental, the total sum of \$3,452,408.50. The fur-seals are voracious eaters, and live on fish, of which, estimating that each individual requires ten pounds a day, they can hardly consume less than six million tons every year. They are also, in their turn, particularly the young ones, preyed upon actively by the killer-whale (*Orca gladiator*). The most probable contingency under which a change may be produced in the seal productiveness of the Pribylov Islands may possibly arise from a diversion of the herds to Behring and Copper Islands, of the Commander Group, in Russian territory, which afford equally favorable grounds for their rookeries, and are now sparsely visited by them. No other coast in the region is adapted to them. Between 1862 and 1880, 287,462 fur-seal skins were shipped from the Commander Islands.

Among other animals of the Pribylov Islands which are applied to economical uses are the sea-lions (*Eumetopias Stelleri*), which are little appreciated in the commercial world, but are invaluable to the natives. Their skins are used

for covering the native boats, and the tough parts are made into boots; their intestines are sewed together into water-proof garments; their stomach-walls are used as oil-pouches; their carcasses are preserved by hanging in the open air for the winter's supply of meat; and their mustache-bristles are sold to the Chinese for use as pickers to opium-pipes, and in the ceremonies of the joss-houses. These animals are far less numerous than the fur-seals. Mr. Elliot does not believe that the number of them, resorting to the islands for breeding purposes, exceeds ten or twelve thousand.

**ALGERIA AND THE SEA.** The population of Algeria, according to the census of 1881, is as follows:

DEPARTMENTS.	Inhabitants under civil administration.	Inhabitants under military administration.	Total.
Algiers.....	1,072,762	178,910	1,251,672
Oran.....	674,880	92,492	767,372
Constantine.....	1,075,855	216,068	1,291,923
Total.....	2,823,497	487,470	3,310,967

The inhabitants of Algeria are of two distinct races—the Arabs, who invaded and conquered the country, and the Kabyles, who have lived in the country since the time of the Romans, and who were driven into the mountains by the Arabs. Great differences exist between these two races. The Kabyles speak a language which is not understood by the Arabs. They build houses, have a municipal organization which was given to them by the Romans, and cultivate with care small tracts of land, fence and protect them like the Europeans. They hate the Arabs, to whose rule they have never entirely submitted. The ruins of former Kabyle villages can be found in many places. The Kabyles retain to the present day the traditions of the cruel conquest of the Arabs. On the other hand, the Arabs are an idle and destructive race. They do not cultivate more ground than is necessary to produce a supply for their immediate wants, and even this little is done without care and without method. The two races are described by recent French authors, the one as industrious and capable of being civilized, the other lazy, vicious, and entirely opposed to civilization. They have completely separated from each other, and are kept apart by their mutual antipathy. It is now proposed that the French shall make an effort to attract the Kabyles by presenting themselves to the latter as their liberators, and inviting them to descend from their mountains to the fertile plains which formerly were occupied by their ancestors. Thus, it is thought, the French Government would be able to reduce its army of occupation, by opposing the Kabyles to the Arabs.

The question of creating a large inland sea on the south of Algeria has long been agitated in France. A few years ago Commandant Roudaire carefully examined the desert which

it is proposed to change into a sea, and made an estimate of the cost. Afterward he organized a company ready to undertake the work. He then applied to the French Government for a concession to go on with the enterprise; and the latter, on April 27th, appointed an extraordinary commission to investigate the subject in all its bearings. The plan of Commandant Roudaire is to change into a sea the three great natural depressions on the south of Algeria, called *Shotts*, known as Rharsa, Melrir, and El-Djerid, which extend from east to west to the Gulf of Gabes, in Tunis. Of these only the first two lie below the level of the sea, while the surface of El-Djerid is on an average 66 feet above, so that a canal would have to be dug through the latter, in order to fill the other two with water. This canal would be about 190 miles long, and, although passing through a desert, could be constructed. With regard to the cost, M. Roudaire estimated that about 46,800,000 cubic yards of sand and clay and 1,950,000 cubic yards of rock would have to be removed, which, at 15½ cents per cubic yard, would amount to \$7,500,000. For other digging and excavation M. Roudaire estimates \$2,800,000, which, together with the cost of the necessary machines, and \$4,000,000 for miscellaneous expenditures, would bring the total amount to about \$15,000,000. This sum had been subscribed, and the company only asked of the Government the concession, and the land which will border on the sea. Among the receipts expected by the company, the principal ones were those from fisheries and salt-works which were to be established.

The commission appointed by the Government divided itself into three sub-commissions—the first a technical one, which was to examine into the feasibility of the project; the second a physical commission, which was to examine into the meteorological and sanitary conditions; and the third a political one, to investigate the question from a political, strategical, moral, and commercial view. The first and most important sub-commission came to the conclusion that the plan was a feasible one, and could be practically carried out. With regard to the cost, however, the commission rejected completely M. Roudaire's estimates. According to its own calculation, it arrives at the following result: If the *Shotts* are to be filled in to the necessary height, it would require a constant flow of 243 cubic yards of water per second in order to make up the losses by evaporation, and to keep the sea at the proper level. The canals must be wide and deep enough to furnish this amount of water, while, at the same time, the current must not exceed 1½ foot per second. According to the estimates of the commission, the construction of the canal would cost, in ordinary ground, 15½ cents per cubic yard, and for rocks 46½ cents per cubic yard, or, in all, \$90,600,000. In order to fill the proposed sea, 223,600,000,000 cubic yards of water would be necessary, and, to do



this at the rate of 243 cubic yards per second, or 6,696,000,000 per year, twenty-nine years would be necessary, without taking into account the loss by evaporation. If this loss is taken into account, the commission thinks, the sea would never be filled at that rate. It furthermore thinks that the formation of an inland sea could not be undertaken, with any expectation of success, if a longer time than ten years was required to fill its basin. But, in estimating the amount of water required, both for filling and replacing the losses by evaporation during the ten years, the commission arrives at a total of 289,000,000,000 cubic yards. This would necessitate a supply of 915 cubic yards per second. As to the amount of the expense, the commission estimated the cost of construction at \$145,539,800, other expenses at \$7,276,990, and interest on the capital for twelve and a half years, at 5 per cent, at \$95,510,500—in all, \$248,327,290. The second sub-commission was of the opinion that an inland sea would bring about a decided improvement in the temperature, climate, and sanitary condition of the country. The third sub-commission reported that, in its opinion, no international difficulties were to be apprehended in consequence of the formation of the sea. It would offer but small advantages in the military defense of the country, while for the navy the most important result would be the creation of a port at Gabes. It could not be assumed that the sea would become the means of creating a large commerce. If an improvement of the climate should take place, it might be possible to permanently settle the Arabs, and to accustom them, under the direction of the Europeans, to regular labor. The full commission, after having received these reports, passed the following resolution at its last session, held on July 7th:

The commission, while fully appreciating the interesting labors of M. Roudaire, and admiring the courage and perseverance which he has shown in the course of his researches in the south of Algeria and Tunis, is, in view of the fact that the expenses would be out of all proportion to the benefits to be derived therefrom, of the opinion that it is not advisable for the French Government to encourage this undertaking.

**ALPS, TUNNELS OF THE.** In May, 1882, the tunnel through the St. Gothard was finished and formally opened. This great work was begun in 1870, by Switzerland and Italy. These countries had entered into a convention for that purpose in 1869, which Germany joined in 1871. The cost was estimated at 187,000,000 francs, of which 85,000,000 francs were to be furnished by government subsidies, Italy paying 45,000,000, and Germany and Switzerland 20,000,000 francs each. The length of the tunnel is 14.92 kilometres, or about nine miles. It begins at Goeschenen and ends at Airolo. With the exception of a curve of 240 metres, it is perfectly straight. In addition to the tunnel, it was proposed to build the following lines: Lucerne-Küssnacht-Im-

mensee-Goldau, Zug-St.-Adrian-Goldau, Goldau-Flüelen-Biasca-Bellinzona, Bellinzona-Lugano-Chiasso, and Bellinzona-Magadino-Luino, with a branch to Locarno. In 1876 it was found that a very considerable deficit existed, which was estimated at 102,000,000 francs. At a conference of the three powers, held in 1877, this was reduced to 40,000,000 francs by dropping the lines Lucerne-Immenensee, Bellinzona-Lugano, and Zug-Art. The railroads belonging to the Gothard system, according to this calculation, have a length of 186.6 kilometres, or 116 miles. The deficit was covered by subsidies from Italy and Germany to the amount of 10,000,000 francs each, and from Switzerland 8,000,000 francs, while the balance of 12,000,000 francs was raised by the Gothard Railroad Company. The highest point of the tunnel is 1,162.5 metres above the level of the sea. (See ENGINEERING.)

The St. Gothard Tunnel was regarded in France, long before its completion, with feelings of envy, as it was feared that a great portion of the through freight from the North Sea to the Mediterranean would be lost to the French railroads; and when, therefore, in 1880, the Swiss Federal Council inquired of the French Government whether it would favor an international conference on the subject of a tunnel through the Simplon, a pass through the Alps in the Canton of Valais, the latter answered that the subject was even then being considered by the proper ministers. The consideration of this question was interrupted by a ministerial crisis. Then a motion was made, and supported by 109 deputies, in the French Assembly, to assist the Simplon line with 50,000,000 francs. A commission was appointed to investigate the matter, which made a technical examination of the proposed route, but rather favored another which was spoken of at the time, through Mont Blanc. The general elections again put a stop to the work, as it is a parliamentary custom in France, as elsewhere, that a question proposed in one House falls to the ground when the term of the Assembly expires. Nothing has since been done by the French Government. The Railroad Company of Western Switzerland, which is largely interested in the proposed Simplon Tunnel, has recently again applied to the Swiss Federal Council, and the latter has addressed the French Government. But, owing to fresh ministerial complications in France, it has seemed most prudent to postpone action until the negotiations with France for commercial customs were concluded.

For the Mont Blanc route it is claimed that it would secure for France the through freight from Calais to Chamounix, on the Italian border, for 928 kilometres, and that the distance by this route would be 85 kilometres less than by the Mont Cenis route, which is now used, between Calais and Piacenza. The road from Calais to Genoa, through Mont Blanc, would be 41 kilometres shorter than through

the St. Gothard, and 25 kilometres shorter than by way of Mont Cenis.

One of the results of the St. Gothard Tunnel is the opening of the new railroad from Novara to Pino, the most direct route between the St. Gothard and Rome. The Milan line ascends the Monte Ceneri at Giubiasco, a village below Bellinzona, while another railroad branches off to the right to Locarno, passing through the swampy delta where the Ticino empties into the Lago Maggiore. At the first station of this road, at Cadenazzo, another road branches off, which, passing along the left bank of the lake,

the through commerce from England to the Mediterranean, and which has been brought forward very recently, is to build a new and direct line from Calais to Marseilles. Among the promoters of this new line are M. Rothschild and a number of deputies. The line after leaving Calais would touch Boulogne and Abbeville, then leaving the Railroad of the North, which from Abbeville extends on to Amiens, it would go direct to Paris by way of Beauvais and Pontoise. From Paris it is to pass by way of Nevers to Lyons, and from there would follow the line from Paris to the Mediterranean,

to Avignon, and Marseilles. This great line would make several important connections, as follow: with Dijon, Lausanne, Geneva, and Italy by way of Dôle and Poligny; with St. Etienne; with Clermont-Ferrand; and with Cette. These connections bring the new line in direct communication with the different lines of the great French companies, and with the Swiss and Italian railroads. In addition, all local roads which could be joined with the main line or its branches would be ceded to this company. (See *ENGINEERING*.)

#### ANGLICAN CHURCHES.

The history of the Church of England during 1882 was marked by continued agitation respecting questions of ritual, and the right of clergymen to obey in respect to them the monitions of their consciences, as opposed to the decrees of the secular power; by the progress of movements seeking to reform the system of patronage; and by continued activity on the part of the advocates of disestablishment and disendowment.

A return issued by the House of Lords shows that there were in the province of Canterbury, in 1880, 4,371 stipendiary curates, and in the province of York, 1,269, making a total, in England and Wales, of 5,640.

A statistical table, published in the "Church Times," gives the total number of confirmations in the two ecclesiastical provinces, during 1881, as 176,464; of these, 105,910 were of girls and women, and 70,554 of boys and men. The largest number of confirmations in any one diocese was 15,525, in that of London; the next largest, 15,183, in that of Manchester; and the third largest, 11,517, in the diocese of Lichfield.

**CONDITION OF CATHEDRAL CHURCHES.**—The Royal Commissioners for inquiring into the condition of cathedral churches in England and Wales stated in their first report that they had



PROPOSED TUNNELS OF THE ALPS.

leads to Pino. Here it connects with the Italian road, which, after passing to Sesto by way of Luino, crosses the Ticino, which leaves the lake at that point, and then after crossing the railroad from Arona to Milan passes on to Novara and there connects with the roads to Turin and Genoa. The entire line from Pino to Novara is forty-one miles long, and passes through eighteen tunnels, which together have a length of eight and a quarter miles.

Another plan to preserve for French roads



held sixty-two meetings, and had had twenty-nine cathedrals under consideration. The report recommended that application should be made to Parliament for the establishment of a Committee of Privy Council for cathedral purposes, to consist of the Archbishops of Canterbury and York, the Bishop of London, the Lord President, the Lord Chancellor, and two other members of the Privy Council (being members of the Church of England), and to have power to approve cathedral statutes. In a statement of the general principles which they had adopted for their guidance, the commissioners indicated that they would propose regulations for the conduct of cathedral services, and suggested that the capitular bodies might give instruction in theological subjects, and offer their services as preachers; while canons, where accommodation renders it possible, should reside within the cathedral precincts for eight months during the year, and should not hold preferment inconsistent with the performance of diocesan duties. All propositions recommended in the report are qualified by the reserve that vested interests must be respected.

The *Bishopric of Newcastle* was constituted by an order of council issued in May, the diocese to consist of the county of Northumberland and the towns of Newcastle and Berwick-upon-Tweed; the parish church of St. Nicholas, at Newcastle-on-Tyne, to be the cathedral church; and the bishop to be subject to the metropolitan jurisdiction of the Archbishop of York. The Rev. Ernest Roland Wilberforce was appointed bishop of the new diocese, and was consecrated in Durham Cathedral July 22d, and enthroned on the following Thursday.

A report in favor of the separation of the Channel Islands from the see of Winchester, and their constitution into a separate diocese, has been made by a joint committee of the two Houses of Convocation. The new bishop, it is proposed, should have jurisdiction over the English congregations in Europe which are not under the direction of the Bishop of Gibraltar.

**MISSIONARY SOCIETIES.**—The reports of the missionary societies of the Church of England showed that they had enjoyed a year of financial prosperity at home, and of encouraging success in the mission-fields abroad. The income of the *Church Missionary Society* had been £221,135, and had been exceeded in only two years—1878 and 1880—in the history of the society. The expenditures had fallen below the income. More than £8,000 sterling had been applied for specific purposes, among which were included a college in Hang-chow, China, the extension of the missions on the Niger and among the Esquimaux, etc. The society employed 260 missionaries, 226 native clergy, and 2,900 native lay agents, and had connected with its churches 86,000 communicants, 160,000 native Christian adherents, and 1,527 schools, with 65,000 scholars. The mis-

sion in Sierra Leone continued to develop self-reliance, and make progress in self-support; a large re-enforcement of laborers was to be sent to Uganda, on the north shore of the Victoria Nyanza. Considerable numbers of Moslem children were attending the schools in Palestine; a station in connection with the Persian mission was soon to be opened in Bagdad; in India the native churches were growing in number and strength, and 120 of the clergy were native against 94 European missionaries; better relations had been established with the Bishop of Colombo, in Ceylon; and an extension of the mission in China—where the native Christians had doubled in the last five years—was proposed, in three of the provinces.

The *Society for the Propagation of the Gospel* had received, on all accounts, £134,978, of which £36,643 were in special funds for particular objects. It employed 594 missionaries, and 1,283 catechists and teachers, and had 300 students in colleges abroad. The field of the work of this society includes British residents in the colonies, and everywhere, of whom the membership of its churches is chiefly composed, and only a small proportion of its resources is spent in work among the heathen. The bishops of Madras reported to the society that the number of baptized native Christians connected with the Church of England had increased during four years from 79,917 to 101,246, the increase being 21,329, or 27 per cent. One half of this increase belonged to the Church Missionary Society and one half to the Propagation Society. The mission at Rangoon, in Burmah, had now fourteen ordained missionaries (including six native clergymen), 1,400 communicants, 3,500 native Christians, and 54 chapels.

The receipts of the *South American Missionary Society* were £11,639, and its expenditures £12,887. Its mission in Terra del Fuego was under the charge of one clerical and eight lay missionaries. The clerical missionary, the Rev. Thomas Bridges, had compiled a grammar and dictionary of the Yahgan language, and had translated the Gospel of Luke and the Acts of the Apostles, and was now engaged upon a translation of the Gospel of John, into that language.

**CHURCH AND STATE.**—Both Houses of the *Convocation of Canterbury* met for the dispatch of business, February 14th. The *Convocation of the Province of York* met at the same time. An important report on "Church and State," prepared by a joint committee of the two convocations, was considered in both bodies, and was approved in the Convocation of Canterbury, but was deferred in the Convocation of York. Its substance is as follows:

Your committee having been appointed to consider the constitutional relations between the authorities ecclesiastical and civil in this Church and realm, and the best methods whereby common action may be taken by them in matters affecting the Church, have, in conference with a similar committee of the Lower House of the Convocation of Canterbury, agreed to

the following resolutions, which they have now the honor to submit as their report, viz.:

1. That no settlement of ecclesiastical judicature will be satisfactory which does not proceed upon the principle that the ancient canonical courts be preserved, subject to such amendments as may be deemed necessary, and shall receive synodical approval.
2. That all ecclesiastical judges be, as far as possible, canonically qualified and commissioned.
3. That the Archdeacon's Court be retained, and strengthened if necessary.
4. That all questions relating to doctrine, ritual, and discipline, except such as come under the jurisdiction of the archdeacon, be referred, in the first instance, to the bishop, who may stay all proceedings, or hear the cause either in *camera* or in his court, as he may determine.
5. That the ancient provincial courts of Canterbury and York be retained with their separate jurisdictions.
6. That, in accordance with the constitution of this Church and realm, the right of appeal for the maintenance of justice in all ecclesiastical causes lies to the Crown.
7. That, in cases of appeal to the Crown for the maintenance of justice in questions involving doctrine or ritual, the judgment of the spirituality shall be required on the precise points of doctrine or ritual which are involved, and that such judgment of the spirituality be made public.
8. That for the purpose of the seventh resolution the term "spirituality" be taken to mean the Upper Houses of the two convocations, assisted, if they think fit, by learned divines of the Church of England.
9. That when those who are appointed to hear the appeal are not unanimous, they shall give their opinions *seriatim*.
10. That when a clerk has been acquitted, no appeal be allowed.
11. That when on appeal to the Crown the judgment of the Church court is to be varied, the cause should be remitted to the court the judgment of which is appealed against, in order that justice may be done therein according to the order of the Crown.
12. That, in accordance with canon 122, whenever in any cause the sentence is of a spiritual character, such as exclusion from the Church, excommunication, or degradation, or of a mixed character, such as suspension *ab officio et beneficio*, or deprivation, the sentence be pronounced by the archbishop or the bishop himself in open court.
13. That it is desirable that, in addition to any statutory enactments which may be recommended, her Majesty be requested to grant to the clergy in their convocations her royal assent and license to enact such canons as may be found necessary.

Measures concerning pluralities and the union of benefices, the performance of ecclesiastical duties, the constitution and management of Queen Anne's Bounty and Patronage, were also discussed; and a large share of the attention of both bodies was occupied with the consideration of the case of the Rev. S. F. Green, Vicar of St. John's, Miles Platting, who was lying in prison for contumacy in refusing to obey an admonition of court ordering him to discontinue ritualistic practices.

At the meeting of the Convocation of Canterbury in May, a committee was appointed to make inquiries for the purpose of ascertaining the tenets and practices of the members of the Salvation Army, and to consider how far it was possible to attach that body to the

Church, and "generally to advise the clergy as to their duty in the matter."

CASE OF REV. S. F. GREEN.—The case of the Rev. S. F. Green, of Miles Platting, the clergyman imprisoned for contumacy, continued to occupy the attention of the public, the clergy, and the convocations, without developing any incidents of striking novelty. Early in the year, Mr. Green replied to a number of letters of sympathy which he had received, saying:

There are three great principles involved in our present struggle, and all alike are matters of the first consequence: 1. The rights of the Church. 2. Our rights as citizens to the benefit of the law. 3. Our rights as men to religious liberty. What the end may be we can not forecast, but surely, if we be faithful to God, the future must be in our own hands.

All hope that the Government could be induced to intervene in behalf of the prisoner under the existing conditions was cut off by the Home Secretary's replying to a request for such intervention made by some of Mr. Green's friends, that "the powers of the Crown to discharge persons from custody would not be rightly or even constitutionally exercised in the case of a person imprisoned for contempt of court, committed by a persistent disobedience to a competent tribunal." The case of Mr. Green was brought to the attention of the Convocation of Canterbury at its session in February, in the form of a *gravamen* adopted by the Lower House expressing the universal feeling of regret and uneasiness at his continued imprisonment, and praying the bishops to interfere for his release, either by memorial to the Crown, or in any other way which they might think desirable. In the discussion following the presentation of this petition in the Upper House, the Bishop of Lincoln spoke of the pain with which the whole body regarded the imprisonment of Mr. Green. The Bishop of Peterborough controverted the plea that Mr. Green was entitled to consideration because he was acting conscientiously, saying that, "if they once allowed a man to set up a plea of conscience against the authority of law, of course there was an absolute end of law. When a man sets up the plea of conscience against law, one of two things is certain to happen. The community must either feel the law to be unjust, and repeal or amend it; or, the community, considering the man's conscience ill-informed, must retain the law, and the man must suffer." He, however, condemned the manner in which the Church Association had undertaken to enforce the law, intimating that they had acted very unwisely in locking the defendant up when other remedies less violent and less liable to provoke sympathy were provided; and when by waiting three years they might have deprived the offending clergyman of his living; and insisted that the course taken by the promoters of the suit against him was diametrically opposed to the whole spirit of the Public Worship Regu-



lation Act, and almost against its letter. The Bishop of Lichfield took notice of the grave dangers involved in the continuance of the existing ecclesiastical tension. He alluded to the time when in his boyhood he had seen four hundred men come forth from the General Assembly of the Established Church of Scotland, leaving behind them their parsonages and their incomes, on a question which was almost exactly the same as in the present case, and said that:

He would be sorry to speak words of unnecessary alarm, but he feared that things might be tending toward a similar secession from the Church, or perhaps more likely to hasten disestablishment. He did not look forward to disestablishment with so much alarm as some of their lordships, but he would greatly dread a secession from the Church such as was, he believed, contemplated—perhaps more than contemplated—as possible by thousands of Churchmen. To avert such a serious issue they should exert themselves strenuously. He believed that they would be doing a good and righteous thing, even if the crown lawyers were to return the same answer, if they were to unite in memorializing the Crown. The question was ultimately one of God and Cæsar, and they would never make those who sympathized with Mr. Green think otherwise.

The Archbishop of Canterbury assented to the views of the Bishop of Peterborough as to the unwisdom of the promoters of the suit against Mr. Green, but said that it was hard to understand the defendant's scruples against obeying the law, and that he could find abundant authority in the action of his ecclesiastical superiors for observing its requirements. The discussion was ended by the adoption of resolutions:

That this House sympathizes in the general feeling of pain and disapproval with which the prolonged imprisonment of the Rev. S. F. Green is regarded; that this House is of opinion that the promoters of the suit against Mr. Green, in resorting to the older and severer process of the writ *de contumacia capiendo*, have taken a step which was in excess of the requirements of the case, and which has proved injurious to the peace and welfare of the Church; and that this House, having regard to the serious legal and constitutional difficulties in the case, regrets to feel itself precluded from approaching the Crown with a petition for Mr. Green's release.

In the Lower House of the Convocation of York, a *gravamen* was adopted as an *articulus cleri*:

That the continued imprisonment of the Rev. S. F. Green, a clergyman of this province, is a perplexity and scandal to this House and to the Church at large.

And this was supplemented by a resolution:

That the Lower House, while it does not feel called upon to express any opinion as to Mr. Green's conduct, humbly requests of the Upper House to take some united action, whether by way of an address to the Crown or otherwise as they may be advised, which may lead to the removal of this scandal, by the release of the Rev. S. F. Green.

This request was met in the Upper House simply with an exposition by the archbishop of the legal difficulties in the way of taking such action as was desired. During the discussion of the subject in the Upper House, the

Bishop of Manchester, Mr. Green's diocesan, related the history of his connection with the case, and explained his position with reference to it. Instead of the parish of St. John's, Miles Platting, being "a desert," as had been alleged, when Mr. Green came to it, it had been in charge of an excellent clergyman, and had a good congregation, though of a different kind from the one to which Mr. Green had ministered. The present congregation was not composed of parishioners, but was one which had been gathered of persons who liked the ritual. In the very year in which the proceedings against Mr. Green were commenced, far from the parish of St. John's, Miles Platting, being a scene of perfect unity and peace, he had a petition signed by 320 parishioners asking him to interfere. It was framed in loose and vague language, and contained no definite charges, and he therefore put it aside, hoping that by private influence with Mr. Green he might stop proceedings. They told him that as they were working-men, and as he refused them redress, they had no alternative but to put themselves in the hands of the Church Association. The Church Association had published a document in which they said they did not designate the three men who were selected as prosecutors, but that their names were handed to them by some of the aggrieved parishioners. At any rate, when the representation came, it was contrary to his own nature and desire to encourage these proceedings. If he could have stopped them in any legitimate way, he should have felt bound to have stopped them, but an act of Parliament having been passed which gave the aggrieved parishioners certain rights, he did not consider that he had a right as an individual, if he could offer them no redress, to step in and prevent them from obtaining their legal remedy." On the 2d of December, 1878, he wrote to Mr. Green, calling his attention to the complaints that had been made, expressing a desire to avoid litigation, and inviting him to call at the registry, examine the papers in the case, and submit to the authority of his bishop—under protest, if he preferred; else, the writer would have no choice but to allow the proceedings to go on. Mr. Green called, but refused to look at the papers, or to submit himself to his bishop, and the latter therefore felt—"though he took that step with the greatest possible pain and reluctance—that he had no alternative but to allow the proceedings to go on. He had frequent complaints—four or five—with reference to Mr. Green, between 1871 and 1881. He admonished Mr. Green in 1871, but Mr. Green did not discontinue the practice of the mixed chalice, which he mixed ceremonially, in accordance with the decision of Sir Robert Phillimore, and he (the bishop) had a letter before him in which Mr. Green said, 'I will obey your lordship's admonition.' In 1877 three charges were brought against Mr. Green of using vestments and incense. Mr. Green

then explained how he came to use them, and told him that they were introduced in 1876 without any consent on his (the bishop's) part, and without any reference to him. Mr. Green made no change in those matters, and in 1878 came a petition from 320 persons, and later still, in December, 1878, there came a representation. He had now laid the whole case before the convocation, and he asked them frankly—he was not at all afraid of what might be said, for he could justify entirely to his own conscience the course which he had taken—he asked them as Englishmen, fairly minded, whether they were not willing to make allowances for the difficulties in which a bishop was placed by a clergyman who would neither acknowledge the law of the land nor submit to his decision or advice?"

Sunday, March 19th, was the anniversary of Mr. Green's consignment to prison, and was celebrated as such with special observances and prayers in a large number of metropolitan and provincial churches. Meetings in view of its near approach were held during the week preceding the anniversary, by branches of the English Church Union and the Workingmen's Society, at which resolutions thanking Mr. Green for his consistent defense of the principles at stake, and expressing sympathy with him and with his wife and family, were passed. At the sixth anniversary of the Church of England Workingmen's Society, in August, resolutions were passed expressing indignation at the imprisonment of Mr. Green by a court of at least doubtful validity, and declaring that "Churchmen should at once make known clearly to their rulers in church and state that they can not and will not recognize the authority of Parliament, and courts created by it, to deprive a priest of the cure of souls committed to him by Almighty God, acting through the appointed ministers of his Church." A bill designed to open the way for the relief of the suffering clergyman, which had been introduced in the House of Commons, was lost. Thereupon, the Archbishop of Canterbury wrote to Mr. Gladstone, August 16th, representing to him and to the Government that the three years which the law required to elapse before an order of inhibition could operate a deprivation of the offender's benefice had that day expired, and that Mr. Green appeared to be no longer the incumbent of Miles Platting. His Grace, therefore, urged upon the Government the duty of at once putting an end to the imprisonment. Mr. Gladstone replied, promising careful consideration of the matter. On the 8th of September, the Diocesan Conference of Carlisle adopted a memorial to the Home Secretary, showing: "1. That, according to the provisions of the Public Worship Regulation Act, the Rev. S. F. Green is no longer legally incumbent of Miles Platting. 2. That, this being so, it appears contrary to all principles of justice that Mr. Green should still be kept in

prison. 3. That the Bishop of Carlisle, and the other members of the conference, would gladly learn from her Majesty's Secretary of State whether there is any reason why Mr. Green should not be set at liberty." On the 16th of September, Mr. Gladstone informed a committee of the Church of England Workingmen's Society that the matter of Mr. Green's release from imprisonment was in the hands of the Lord Chancellor, who was "most anxious to carry it through." On the 27th of September, the Archbishop of Canterbury gave to Sir Percival Heywood, the patron of the living, the formal notice required by the Public Worship Regulation Act, that the benefice of St. John's, Miles Platting, had become void, and expressed the hope that his taking this step might facilitate Mr. Green's release.

Sir Percival failed to pay any attention to this notification; but a few days afterward Mr. Green wrote to the patron from his prison in Lancaster Castle, tendering his resignation of the benefice. He also wrote to the congregation and parishioners of St. John's, stating the reasons by which he had been influenced in taking that step. Alluding to the fact that the Bishop of Manchester had made a motion in Lord Penzance's court for his release, he said that, feeling it his duty to resist the usurpations of Lord Penzance to the utmost of his power, he must deprecate the appearance of a bishop in court, even by proxy. He was, however, of the opinion that the patron of the living ought not to be permitted to embark on a new venture in disputing the legality of his deprivation, for that would entail much expense on what was probably a foregone conclusion. Lord Penzance, on the 4th of November, delivered judgment on the application of the Bishop of Manchester for Mr. Green's discharge from his imprisonment. He reviewed all the facts in the case, and said that Mr. Green could have been discharged at any time, by satisfying the contempt. The law must be obeyed, and the Court considered it had been satisfied, though not willingly, by Mr. Green. As he was no longer vicar of Miles Platting, the Court was enabled by a reasonable interpretation of the statute under which he was imprisoned to put an end to the imprisonment which Mr. Green himself seemed so little desirous of terminating. Mr. Green was accordingly released Sunday morning, November 5th, after an imprisonment of one year and ten months. The Rev. W. Ruthven Prym, curate of the parish church at Lytham, was appointed by Lord Penzance to the charge of the vacated benefice. The church-wardens, however, representing the congregation to whom Mr. Green had ministered, refused to acknowledge him, and addressed him a note informing him that they would not accept him. Subsequently the benefice was offered by the patron to the Rev. Henry Cowgill, who had been for a long time Mr. Green's curate, and was accepted by him.

CASE OF MARTIN vs. MACKONCHIE. — The



decision of the Judicial Committee of the Privy Council in the appeal case of Martin against Mackonochie was given February 3d. This was the third suit brought against the incumbent of St. Alban's, Holborn, by Mr. Martin. The first was instituted for ritualistic practices in 1867, and resulted in a monition calling upon Mr. Mackonochie to abstain from the practices complained of. The monition was disregarded, and a second suit was instituted in 1874, and Sir Robert Phillimore suspended Mr. Mackonochie for six weeks and appended another monition. The services, however, continuing unchanged, application was made to Lord Penzance, who had since become judge, and he issued a fresh monition. This was equally disregarded, and Mr. Mackonochie was then suspended *ab officio et beneficio* for three years. The Queen's Bench was then appealed to, and pronounced that Lord Penzance had exceeded his powers, and issued a writ of prohibition against him. The Court of Appeal, which was finally sustained by the House of Lords, held however that, except in respect to two points, Lord Penzance's action was right. Mr. Martin then instituted an altogether fresh suit against Mr. Mackonochie for deprivation, but Lord Penzance refused to hear it on the ground that his last judgment had not been enforced, which would have resulted in Mr. Mackonochie being sent to prison for contempt. It was against this decision that the appeal was now made to the Privy Council. The Lord Chancellor delivered the judgment of the court, which, after recapitulating the facts of the case, and stating the reasons given by Lord Penzance for his judgment, proceeded to state that from this judgment and from the reasons assigned for it their lordships found themselves compelled to dissent. They did not think that it could have been the intention of the learned judge to affirm the existence generally of a discretion in an ecclesiastical court to refuse by decree to pass any sentence of canonical censure or punishment upon a clerk in holy orders found by the same decree to have been guilty of offenses against the law, properly charged. They thought the judge had no discretion, while finding the defendant guilty of ecclesiastical offenses, to absolve him from all ecclesiastical censure or punishment for those offenses. Contempt or contumacy in another suit can not deprive the bishop (or a promoter who satisfies the bishop that there is reason for proceeding in respect of new offenses by a new suit) of the remedies given by the Church Discipline Act. Their lordships did not find that any obligation is cast by law upon the promoter of a suit in an ecclesiastical court to take proceedings for the imprisonment of a party guilty of contempt. Their lordships thought that if, as the case now stands, a more severe penalty should appear to the learned judge to be called for, he might still give the respondent one more opportunity of being

heard against such a sentence, and of submitting himself to the court and the law. Their lordships agreed with Lord Campbell's remarks in *Head vs. Saunders*, where he says that, "except under peculiar circumstances, a court of final appeal ought not to decide any cause in the first instance, as it ought to have the benefit of the discussion and judgment in the court below; and there ought not to be an original judgment pronounced from which there is no appeal." Their lordships, therefore, would advise her Majesty to reverse the sentence of the 5th of June, 1880, so far as relates to the matter complained of by this appeal, and to remit the case to the court below, to decree against the respondent such lawful and canonical censure or punishment as to that court shall seem just.

APPEAL OF REV. WILLIAM ENRAGHT.—The appeal of the Rev. William Enraght against Lord Penzance and John Perkins was decided in the House of Lords, May 22d. The appellant was the Vicar of Holy Trinity Church, Bordesley, Warwickshire, and the suit was promoted by the respondent Perkins (one of the reverend gentleman's church-wardens) on account of fourteen offenses in the celebration of divine worship, in respect of which it was alleged that the appellant had been guilty of acting illegally. The case came before the Queen's Bench division on an application for a writ of *habeas corpus* to discharge the defendant from custody for disobedience to the monition of Lord Penzance, as well as for a prohibition. The Court of Appeal allowed the discharge from custody, but refused the prohibition. Their lordships now affirmed the order of the Court of Appeal, and dismissed the present appeal with costs.

Another appeal in this case, in which the question was whether a new church-warden could be substituted for Mr. Perkins, who had ceased to be a church-warden and parishioner, as promoter of the suit against Mr. Enraght, was decided by the Judicial Committee of the Privy Council, July 4th, in favor of Lord Penzance's judgment that the substitution could not be made.

The Bishop of Winchester, in November, gave notice to the patrons of Holy Trinity, Bordesley, that under the Public-Worship Regulation Act the benefice had become vacant, the three years from the date of the monition against the vicar, Mr. Enraght, having expired. A protest signed by a considerable number of the parishioners was issued, denouncing the action taken to remove the vicar as uncanonical, unconstitutional, and cruel.

The Church of St. Vedast's, London, after having been closed for two years, on account of the ritualistic practices of the rector, the Rev. T. Pelham Dale, was reopened in September, with a new incumbent in charge.

ENGLISH CHURCH UNION.—The *English Church Union*, the most active and influential of the ritualistic organizations, had at the be-

ginning of the year 270 branches and 19,930 members and associates, having received 2,450 accessions during the preceding twelve months. The twenty-third anniversary of this society was celebrated June 10th, with special services in more than three hundred churches in London. At the regular annual meeting of the society, Mr. Wood, its president, speaking with especial reference to the case of Mr. Green, said that the Union, it must be understood, rejected the authority of the Privy Council, and of the courts subject to its jurisdiction, in spiritual matters; it maintained the integrity of the ornaments rubric, and held that the Church of England had drifted into a position where, if any reform was to be hoped for, resistance to the encroachments of the civil power had become an absolute necessity. If imprisonments had been stopped only to substitute deprivations, it must be understood that the Union would strenuously resist deprivations by civil courts.

**RITUALISTIC STATISTICS.**—The annual tables of statistics show that the number of ritualistic churches in London and vicinity is gradually increasing. According to the summaries published early in 1882, eucharistic vestments were used in 37 out of 907 churches, against 14 in 1869: incense in 10, against 8 in 1869; altar-lights in 59, against 36 in 1874; candles on the altar in 45; and the "eastward position" was taken in 270 churches against 74 in 1874. Forty-six churches had daily communion, 473 surplised choirs, and 319 free seats.

**CONTROL AND PATRONAGE.**—The annual meeting of the Society for the Liberation of the Church from the Control and Patronage of the State was held May 3d. Mr. H. R. Ellington presided. The society had distributed during the year about a million and a half of publications, and had held 368 meetings. The treasurer's receipts had been £9,759, and his expenditures £9,194. The report of the secretary, referring to general events bearing upon the objects which the society has in view, as well as upon its own particular transactions during the year, recited that among the unusual number of legislative measures dealing with the interests and position of the Church Establishments was a bill introduced by Mr. H. Richard, to simplify the law with respect to interments in cemeteries, which would remove many anomalies in the existing Burial Acts, lighten the burdens on ratepayers, and facilitate the work of burial boards. A bill had also been introduced by Mr. Brinton to reduce and equalize burial fees, and to abolish the payment of such fees except for services actually rendered. A select committee had been appointed to examine into the operation of the law of burial fees. The committee reported, with great satisfaction, that during the year the principle of religious equality had had an important extension in its application to the Universities of Oxford and Cambridge. The new statutes framed by the

universities commissioners went far to abolish clerical restrictions; and, speaking generally, the offices, honors, and emoluments of the universities and colleges would in future be conferred without reference to ecclesiastical distinctions. The three bills before Parliament dealing with the ecclesiastical and charitable endowments of London, proposed to take property which belonged to the public at large, and to devote it afresh to sectarian purposes. On the subject of church patronage, the report stated that Mr. Stanhope's bill only touched the fringe of the evil, and gave fresh legislative sanction to the rest. The society opposed that bill, but supported the measure prohibiting generally the sale both of advowsons and next presentations. The Lord Chancellor's Augmentation of Benefices Bill was open to similar objections. The committee declared their belief that it would be impossible effectually to secure church reform until by disestablishment the Church gained the power of self-government. In regard to the disestablishment of the Scotch Church, it was urged that steps in support of Mr. Peddie's motion should be taken throughout Scotland by means of petitions, etc. At home the tension in the establishment caused by the conflicting views of the different parties within it had rather increased than diminished during the last twelve months. The decision in Mr. Mackonochie's case, and the failure to obtain the release of Mr. Green from prison, had made a deep impression on the minds of those who were already chafing under the yoke of the establishment. The result had been that the principle of spiritual independence had been increasingly dwelt upon by the members of the English Church, and they were slowly coming to see that for its sake all the perils of disestablishment and disendowment might be safely encountered. The tendency of public opinion in favor of disestablishment had been strengthened by the disclosures of the recent census taken by local newspapers.

Resolutions were adopted urging the necessity of supplementing the Burials Act of 1880 by further legislation; expressing gratification at the provision in the new statutes of the universities commissioners for the abolition of clerical restrictions in connection with the headships of the Oxford and Cambridge Colleges; approving Mr. Peddie's motion relative to the early disestablishment of the Church of Scotland; and insisting that the parliamentary oath should be optional, with the provision of an equivalent alternative declaration. At a public meeting following the business meeting of the council of the society, resolutions were adopted expressing gratification at the further progress that had been made during the year toward the attainment of religious liberty at home and in the colonies, as well as at the growth of public opinion on the question of disestablishment; invoking the hearty support of the Liberal party in the House of Commons



to Mr. Peddie's motion for the disestablishment and disendowment of the Church of Scotland; and declaring that "the meeting, while sympathizing with the Episcopalians in their desire for greater liberty and for the removal of evils which now restrict the usefulness of the Church, is of opinion that that liberty can not be enjoyed, and those evils can not be effectually cured, until the Church ceases to be established by law, and becomes a self-supported and self-governed religious community."

The Executive Committee of this society, in October, issued a circular to its supporters relative to its contemplated operations during the coming session of Parliament. It anticipated that domestic questions would receive more attention than they had during the past two sessions, and that new demands for reform would exercise a stimulating influence on the public mind, and make it possible to press the subject of disestablishment with increased earnestness. Preparations were, therefore, making for greater activity. The London School Board elections would be used as a means of urging that the surplus city charities should be applied to educational instead of to ecclesiastical purposes; agitation in support of Mr. Peddie's motion for the disestablishment of the Scottish Church would be renewed; the questions of cemeteries, burial fees, and the training colleges would be dealt with; information was being collected relative to vicars' rates, church rates to repay borrowed money, and other ecclesiastical exactions, and also to the proceedings of the Charity Commissioners in regard to endowed schools. The committee stated, also, that as soon as it could do so with advantage, it would deal directly with the Establishment in England and Wales.

The annual meeting of the *Church Defense Institution* was held in June. The Archbishop of Canterbury presided, and remarked, in his opening address, that very little had been openly done during the past year to encourage an attack upon the Church of England. It was, however, to be remembered that the most dangerous periods were sometimes those when there was little outward appearance of a violent assault. He did not look with any satisfaction upon those who thought it their duty to resist all attempts at reform made within the Church herself. He hardly thought it was a fair mode of action, and was certain that those who were conscientiously desirous of seeing the Church of England with other instrumentalities in the country doing as much good as possible for the promulgation of the gospel, would not be likely to endeavor to thwart the usefulness of the Church by opposing reforms where they thought reform necessary. An impression seemed to be sometimes disseminated at meetings of the Liberation Society that the Church of England had done very little for the education of the working

classes, but he maintained that the contrary was the case.

The question of the *amendment of the system of patronage and the abolition of purchase in the Church* has been discussed with considerable interest, the discussion centering chiefly around the bills on the subject proposed in Parliament by Mr. Leatham and Mr. Stanhope. The subject was considered in the Convocation of York, at its meeting in February, in connection with a resolution offered by Canon Gore, of Chester:

That, with a view to remove abuses now incident to the sale of the right of patronage in the Church, it is expedient—(a) That the sale of the new presentation to a benefice be forbidden; (b) That an interval of not less than five years intervene between two sales of the same advowson; (c) That provision be made to prevent donative benefices from being used to create vacancies in presentative benefices; (d) That diocesan boards of patronage be incorporated, with the power of acquiring advowsons, whether by gift or purchase; (e) That all deeds affecting the advowson of a benefice be registered publicly in the diocesan registry; (f) That large additional powers be granted bishops to refuse institution to unworthy presentees.

The Central Council of Diocesan Conferences, at its meeting, March 7th, adopted a resolution declaring—

That, in view of the report of the Royal Commission of 1879, and of the decisions of diocesan conferences, the most strenuous efforts should be made to obtain the passing of an act without delay, which should enforce the principle that "patronage partakes of the nature of a trust to be exercised for the spiritual benefit of the parishioners," and should contain clauses (1) for the abolition of the sale of next presentations; (2) for the due regulation and registration of the sale of advowsons; (3) for the conversion of all donatives into presentative benefices; (4) for giving increased powers to the bishop to refuse institution in certain cases and under express limitations and conditions.

At the annual meeting of the Liberation Society, May 3d, Mr. Ellington, chairman, criticising Mr. Stanhope's measure, said that the main defect in it was, that it dealt only with next presentations and failed to touch advowsons. The society could not see that there was any material difference between presenting to the cure of souls in perpetuity and the presentation of any particular minister. A conference of clergy and laity, convened by the Council of the National Church Reform Union, met in London, June 20th, to consider the various measures on the subject which were before Parliament. Mr. Albert Grey, M. P., who presided at the meeting, said that neither Mr. Leatham's nor Mr. Stanhope's measure was adequate to meet the evil. Resolutions were adopted declaring that no reform of patronage could be regarded as satisfactory which did not confer upon the parishioners, by vote or otherwise, directly or indirectly, a voice in the choice of their clergymen; and that no dealing with the subject would be satisfactory that did not provide for its total abolition as soon as possible. Popular discontent with the system of selling advowsons and next presentations found expression on several occasions when

such franchises were offered at public sale, and the proceedings were interrupted or stopped in consequence of the demonstrations against them. A like fate attended some attempts to enforce the payment of vicars' rates by the sale of goods levied upon for the purpose.

**DIOCESAN CONFERENCES.**—The plan of holding diocesan conferences in the several dioceses, at which the clergy and laity could meet together for free, informal discussion of all questions affecting the interests of the Church, which was first started in the diocese of Bangor, has worked so satisfactorily that such conferences have now been founded in all the dioceses of England and Wales, except those of Worcester and Llandaff. The success of these meetings has suggested the establishment of some kind of connection between them, and accordingly the organization of the *Central Council of Diocesan Conferences* has been completed. The object of the organization is stated in its constitution to be "to give greater unity of action to diocesan conferences by considering, through representative members, the resolutions at which such conferences may have arrived, and other matters concerning the interests of the Church which the council may deem it expedient to suggest for discussion by the conferences; and so the general opinion of the Church at large may be obtained on matters affecting its welfare, with a view to their being brought prominently, if thought desirable, before the convocations and Parliament."

It is further provided that the action of the Central Council shall be free from political bias. The council is composed of representatives from the diocesan conferences; while other persons, though not representatives, may be present by special invitation, and speak, but not vote. At the meeting of the Council in March, when the organization was effected, representatives were present from seventeen dioceses, while the dioceses of Oxford and Rochester had not yet chosen representatives. Mr. Cecil Raikes, M.P., was chosen president of the council for the year.

A diocesan conference for the diocese of London was organized in March, and, its constitution and standing orders having been agreed upon, received the approval of the bishop in May. The conference is to consist of 102 clerical and 204 lay representatives, two of the latter—the lord-lieutenant of the county and the chancellor of the diocese—and six of the former being *ex-officio*. All clergymen in priest's orders will, under certain conditions, have a vote in the election of representatives; while the lay electorate will consist of members of the Church of England, residents or rate-payers in their respective parishes. The lay representatives in the conference must be communicants.

**THE CHURCH CONGRESS.**—The twenty-second annual *Church Congress* met at Derby, October 3d. The attendance was large, exceeding two thousand persons. The opening sermon was

preached by the Archbishop of York. The Bishop of Lichfield presided, and, in his opening address, described one of the objects accomplished by the Congress to be the bringing of the several parties within the Church into a position where they could compare their views and attain a better understanding of each other, and to prepare the way for the toleration of differences of opinion. The Church had been free from differences of opinion in no age, not even in apostolic times; and it would, in fact, "not be impossible for a scoffing spirit even to affix our modern party names to some of the apostolic writers themselves." The principal subjects discussed were: "Unity of Belief in Relation to Diversity of Thought," in connection with which a tendency toward the encouragement of greater toleration was apparent in the leading speakers; "The Church and Modern Thought," considered as to the limits of authority and free thought, the harmony of science and faith, and the dependence of morality on revelation; "The Causes and Remedies of Neglect of Public Worship"; and topics relating to the beneficed and unbeneficed clergy, home evangelization, the Church and paupers, the Church and state, the Church and laborers, the Anglican and Roman Catholic Churches, and the Church and the Nonconformists.

**IRISH EPISCOPAL CHURCH.**—A statement of the sums payable to the *Irish Church Temporalities Fund* was published in a parliamentary paper in April. The total amount payable to the fund was set down at £36,961, and was made up as follows: Tithe-rent charge, £22,932; tithe-rent charge annuities, £9,267; perpetuity rents, £884; yearly and other rents and stipends, £88; interest on simple mortgages, £1,518; land annuities, £2,049; interest on mortgages (converted leaseholds), £223.

The twelfth annual session of the *Synod of the Church in Ireland* was opened at Dublin April 18th. The report of the representative body recorded a distinct advance in financial prosperity, notwithstanding the agitation and depression of the past year. The fund devoted to parochial sustentation amounted to nearly £3,500,000; but that sum would still hardly provide £120 for each curate and less than £200 for each incumbent, while three hundred incumbents were obliged to be content with much less. The various investments of the church body were producing a total income of £280,503. A resolution was adopted expressing sorrow and shame at the wide-spread lawlessness prevailing in the country, and urging upon every one the necessity of maintaining the principles of order and good government, of justice and honesty. Much of the time of the synod was spent in the discussion of educational interests. The report of the Temperance Society showed that the whole number of members of the organization was 60,000, and that the accessions had been about 1,400.

The average income of the clergy of the



*Scottish Episcopal Church* is £209, to which may be added the rental value of the parsonage, £20. The total number of members in the Church is 67,483. The strong congregations, except those of Forfar, Johnston, and Stonehaven, are in the large cities.

**BISHOPRIC OF GRAHAMSTOWN.**—The Judicial Committee of the Privy Council gave judgment at the end of June, in an appeal from the Supreme Court of the Cape of Good Hope, respecting the *Bishopric of Grahamstown*, South Africa. The bishop, Dr. Merriman, had brought an action to enforce two decrees of suspension against Dr. Williams, the Dean of Grahamstown, for preventing him from officiating in the Cathedral Church of St. George in Grahamstown, and the colonial Supreme Court had held that it had no power to enforce the diocesan decree. The bishop thereupon appealed to the Queen in Council for a declaration of his right to exercise episcopal authority over Dr. Williams as one of his clergy and as dean. The appeal was dismissed. The grounds on which the decision of the Colonial Court, thus sustained by the Judicial Committee, was based, were as follows:

1. That bishops elected by their respective dioceses are not legally successors of the bishops formerly appointed under letters patent.
2. That there is nothing in law to prevent the Crown from sending out new bishops to supersede the elected bishops.
3. That the elected bishops have no title to the possession or use of the property formerly vested in their respective sees.
4. That consequently the civil courts can give them no protection or relief in questions relating to the use of such property (e. g., churches, parsonages, schools, etc.).

The Right Rev. A. C. Tait, Archbishop of Canterbury, died December 3d. The vacant see was offered to the Right Rev. Edward White Benson, Bishop of Truro, and was accepted by him.

**ARABI AHMED**, Pasha, was born in a little village in the province of Charkieh, in the eastern part of Lower Egypt, almost on the borders of the desert, of one of the families of the fellahs. These compose the lower laboring class. He joined the army under Said Pasha, and was brought to the camp, like all his companions, with hands fastened to a rope that held together all the young fellahs fit for military service taken by the same conscription, or draft. Said Pasha loved handsome men, and Arabi is bulky, and about five feet ten inches (*un metre quatre-vingt*) in stature; his complexion dull and yellow, like the fellahs of Lower Egypt; his figure regular, his head peaked, the forehead high and retiring, that his cap somewhat conceals; his mouth large, lips full, chin square and retiring. The features of his face express firmness, and in character he is stubborn and obstinate. His great merit is his memory, which would be regarded as rare in Europe, and is peculiar to all his kindred. He has now an expression of counte-

nance which has become habitual, and has been acquired by constant practice, and he seems to be in continued thought or reflection. Always melancholy, he has a gentle and soft look. His eyes are very beautiful, black, and surmounted with thick eyebrows. He has not a frank expression, and never looks one full in the face, but casts furtive glances without fierceness; on the contrary, they are attractive by their passiveness, and often prevent one from observing that he never looks more than a few seconds at once at the person to whom he speaks. He is very rarely moved, and speaks gently, without pressing himself, and as if he felt fatigued under the weight of business and thoughts crushing him. His walk is straight, but with a little spring, which is very common in Egypt and the East.

Said Pasha was the first to remove foreign officers from the army and fill their places with native Egyptians. Arabi was of the number, and quickly rose in rank; but, under the caprice of the Viceroy, he was soon put on half pay. He went to the university at Cairo for scientific studies. There he remained a sufficient time to appear to his companions in the army as a learned man. They esteemed him also as a person of piety and of irreproachable morals. He married the daughter of the nurse of Hamid Pasha, son of Abbas Pasha. She had been reared in the palace of the prince.

It is not known when or how he made the acquaintance of Ali Pasha, who became his intimate friend, and brought him out of obscurity. During 1876-'78, he organized a kind of secret society among the fellah officers, which, during exciting events, escaped the notice of the Khedive and his ministers. Ali Pasha was the soul of that society, which had no other object in view than the overthrow of the Khedive. They labored conjointly with bankers in Europe, without knowing the object or means used, but aided by the money and counsels of the bankers of Cairo, who had an interest in bringing about some change in the arrangements imposed on Egypt by Europe. Ali Pasha, whom they proposed to put at the head of the movement, explained it to the Khedive, who combined with them and effected the fall of the European ministry in 1879. The Khedive now made Arabi a colonel, and gave to him the command of a regiment. At this time the intrigues of the ex-Khedive, Halim Pasha, and the Porte commenced, which it is useless to describe. Each sought to control the society of officers and soldiers, which alone remained, by promises of increased pay and better treatment. It is not necessary to repeat the events which ensued until Arabi became Minister of War. He now represented the native Egyptians, who were known as the National party, and whose watchword was, "Egypt for the Egyptians." "The debt," they said, "was made by Ismail Pasha, and Egypt was not responsible; let Europe collect the debt of Ismail Pasha, whom she holds as a

hostage; so far as relates to reform courts, our institutions suffice for us; if the Europeans are not satisfied, let them go to their own courts at home."

Before he became minister, Arabi had acquired great influence in all parts of the public administration. All those who could approach him, obtained letters of recommendation, which



ARABI PASHA.

were seldom without effect. After he became minister, his hatred of the foreigners, who, he said, were ruining the country, overcame his disinterestedness. In all purchases of supplies for the army, or other objects, the preference was given to the native, even at much higher prices. In all promotions in the army his friends were advanced, and thus he acquired his strength, which was exercised to press the Europeans out of the country. In this state of affairs, England, for the preservation of the great advantages to herself of the Suez Canal, took the first step toward making Egypt a dependency of her own. (See EGYPT.)

The facts, thus far very summarily stated, are derived from a native Egyptian writer, who thus concludes his remarks: "Arabi never had any settled plan; circumstances have made him all that he is; the rôle which he has played is due entirely to the haughty jealousies and intrigues of the Western governments, consuls-general, European and native adventurers, rotten bankers and merchants of little conscience. To-day (July) the position of Arabi is such that, if he were put down, the movement he has commenced would not be thereby ended.

On the contrary, others, such as Ali Pasha el Rouby, Mahmoud Samy Pasha, Mahmoud Pasha Femi, Ali Pasha Femi, Abdulaal Pasha, Toulba Pasha, Yacoub Pasha Samy, and a hundred others, are interested to continue the movement through fear of losing the position which they have obtained, the fortune they have acquired, and even their lives. A Turk-

ish occupation would be of no advantage at present; quite the contrary, the Sultan is wholly interested in prolonging the existing state of affairs, under the hope that a European complication would leave him distinctly the master of Egypt for the future. To restore Egypt to the path of progress in which she was placed by Mehemet Ali and his successors, under the civilizing influence of Europe, a European occupation of the country is necessary, and severe punishment of all the Egyptians, whatever may be their rank in the civil or military positions, who were engaged in the late movements and events. Decimate the corps of gendarmes (*Moustah-fézines*) and the city officers who took part in the massacres at Alexandria and in all the other cities, make a general disbandment of the army, and put the officers on half pay or in retirement. Then form a corps of ten thousand gendarmes for all Egypt, commanded by officers not engaged in the recent events, honest, intelligent, and rigidly examined, and under the control of a superior council

of natives and Europeans, and in which the latter shall be a majority, under the presidency of a European commander-general, who shall receive orders directly from the Khedive for the administration of the interior police, or from the President of the Council of Civil, Judicial, and Financial Affairs. Let these measures be quickly and unhesitatingly adopted, and Arabi would be forgotten in less time than he became known." (See EGYPT.)

ARGENTINE REPUBLIC (REPÚBLICA ARGENTINA). Statistics concerning area, territorial division, population, etc., have been given in the volumes of the "Annual Cyclopædia" for 1872, 1877, and 1878. In an official estimate, the population of the republic at the end of 1880 was set down at 2,540,000; but those figures, if correctly reported, are, perhaps, somewhat exaggerated, and those given in our volume for 1881 (2,400,000) may be regarded as a closer approximation to accuracy. The population of the capital, Buenos Ayres, at the end of 1881, has recently been published at 289,925, against 177,787 in 1869, according to the census of the latter year.

The number of immigrants in 1870 was 39,-



667; in 1871, 20,928; in 1872, 37,037; in 1873, 76,332; in 1874, 68,277; in 1875, 42,066; in 1876, 30,965; in 1877, 28,798; in 1878, 35,876; in 1879, 50,205; in 1880, 41,615; and in 1881, 47,489.

The following table exhibits the nationality and number of the immigrants who landed at Buenos Ayres in 1879, 1880, and 1881:

NATIONALITIES.	1879.	1880.	1881.
Italians .....	22,774	18,416	20,506
Spaniards .....	8,422	8,112	8,474
French .....	2,149	2,175	3,612
English .....	788	588	1,149
Swiss .....	717	581	685
Germans .....	490	445	591
Austrians .....	1,760	879	495
Portuguese .....	28	84	73
Belgians .....	78	57	140
Danes .....	47	54	11
Dutch .....	7	..	10
Russians .....	15	8	34
Greeks and Turks .....	17	11	28
Americans .....	51	21	72
Various .....	364	292	648
Total .....	82,702	76,648	81,468*

The President of the Republic is Brigadier-General Don Julio A. Roca (inaugurated October 12, 1880), and the Vice-President, Don Francisco B. Madero. The Cabinet was composed of the following ministers: Interior, Dr. Bernardo de Trigoyen; Foreign Affairs, Dr. V. de la Plazar; Finance, Dr. Juan José Romero; Justice, Public Worship, and Public Instruction, Dr. E. Wilde; War and the Navy, Dr. B. Victorica.

The Argentine Envoy Extraordinary and Minister Plenipotentiary to the United States and Great Britain is Dr. Luis L. Dominguez (accredited in 1882); the Consul-General (at New York) for the American Union is Señor Don Carlos Carranza.

The Governors of the several provinces, etc., were:

Buenos Ayres .....	Dr. D. Rocha.
Catamarca .....	J. Acuña.
Córdoba .....	M. Juárez Celman.
Corrientes .....	A. Soto.
Entre-Ríos .....	Colonel J. F. Antelo.
Jujuy .....	Dr. P. Blas.
La Rioja .....	J. V. Bustos.
Mendoza .....	J. M. Segura.
Salta .....	Dr. M. S. Ortiz.
San Juan .....	A. Gil.
San Luis .....	Z. Concha.
Santa Fé .....	Dr. M. Zavalla.
Santiago del Estero .....	P. Gallo.
Tucumán .....	M. M. Nouzes.
Gran Chaco Territory .....	Colonel F. Bosch.
Patagonia .....	Colonel A. Barros.
Misiones .....	Colonel E. Roca.

The United States Minister Resident in the Argentine Republic is General Thomas O. Osborn, and the United States Consul at Buenos Ayres is Mr. E. L. Baker.

The Argentine army comprised, exclusive of the National Guard, 7,362 men, as follows: 3,710 foot; horse, 2,647; and artillery, 1,005. There were 4 generals of brigade, 14 colonels-major, 32 colonels, 147 lieutenant-colonels, 143 sergeant-majors, and 816 officers of other

grades. The National Guard was 297,384 strong.

The navy, in June, 1882, was composed of 27 vessels: 2 steam ironclads, 6 gunboats, 2 steam torpedoes, 12 steamers transformed into war-vessels, 3 transports, and 2 sail of the line, with an aggregate tonnage of 12,000, an armament of 88 guns, and manned with 2 chiefs of squadron, 5 colonels, 8 lieutenant-colonels, 6 majors, 7 captains, 26 lieutenants, 22 students, 43 midshipmen, 7 pay-masters, and 26 engineers; 900 seamen, including officers, 2,000 infantry and artillery (National Guard), 1 torpedo section comprising 3 commandants, 8 subaltern officers, and 80 privates. About the end of 1881 the number of vessels was increased by the addition of a new ironclad, the Almirante Brown, armed with six 40-pounder breech-loading guns, of new model, on automatic carriages; eight 8-inch 11½-ton breech-loading Armstrong guns, also of new model, firing projectiles of 180 pounds weight, with 90 battering charges, and a number of smaller guns. The 8-inch guns, so mounted that two can be fired straight ahead and three on each broadside, are described as surpassing in range all the guns hitherto mounted in the British Navy, and inferior to only a few in penetrative power. There is a naval school and a school for cabin-boys, and at Zárate there is an arsenal.

The national revenue and expenditure for the fiscal year 1881 have been officially reported as follows:

REVENUE.

Import duties .....	\$18,500,000
Export duties .....	3,000,000
Warehouse fees .....	350,000
Stamped paper, etc. ....	650,000
Post-Office and telegraphs .....	452,000
Light-houses, etc. ....	83,000
Railways .....	700,000
Sundries .....	1,160,000
Total .....	\$19,598,777

EXPENDITURE.

Ministry of the Interior .....	\$3,262,413
“ Foreign Affairs .....	189,920
“ Finance .....	9,576,646
“ Justice, Public Worship, Public In- struction, etc. ....	1,875,072
“ War and the Navy .....	5,482,450
Total ordinary expenditure .....	\$19,886,501

In this table the expenditure extraordinary is not included. The amount may be estimated at about \$8,000,000.

In the budget for 1882, the national revenue and expenditure were estimated as follows:

REVENUE.

Import duties .....	\$15,979,000
Export duties .....	4,006,000
Warehouse fees .....	380,000
Stamped paper, etc. ....	1,860,000
Direct taxes .....	900,000
Post-Office and telegraphs .....	650,000
Light-houses, etc. ....	46,000
Railways .....	845,000
Interest .....	116,000
Wharfage .....	12,000
Forests .....	30,000
Sundries .....	777,000
Total ordinary revenue .....	\$25,681,000

\* See President Roca's message, at the end of this article.

## EXPENDITURE.

Ministry of the Interior.....	\$4,987,795
Foreign Affairs.....	238,760
Finance.....	12,066,557
Justice, Public Worship, Public In-	
struction, etc.....	2,756,264
War and the Navy.....	6,693,837

Total ordinary expenditure..... \$26,592,713

To which is to be added:

Expenditure extraordinary.....	\$1,562,529
Grand total.....	\$28,155,242

On the subject of the national finances it would be superfluous to add any comments to the remarks contained in President Roca's message (see page 26). To the same message, and to page 28 of our volume for 1881, we would refer for details relating to the national debt.

By the terms of a law, promulgated in 1881, the duties on exports and imports were increased one per cent.

The values, sources, and destinations, respectively, of the exports and imports for the year 1881, are exhibited in the following table:

Destinations.	EXPORTS.	Values.
Belgium.....		\$13,644,951
Bolivia.....		455,341
Brazil.....		1,775,414
Chili.....		1,695,410
France.....		16,117,132
Germany.....		3,875,684
Great Britain.....		8,763,952
Holland.....		8,936
Italy.....		2,356,236
Paraguay.....		323,621
Portugal.....		27,457
Spain.....		1,228,541
United States.....		3,924,877
Uruguay.....		1,936,023
West Indies.....		985,334
South Africa.....		150,807
Other countries.....		50,211
<i>In transitu</i> .....		3,742,577
Total.....		\$56,069,104

From	IMPORTS.	Values.
Belgium.....		\$3,398,550
Bolivia.....		50,188
Brazil.....		2,588,841
Chili.....		22,805
France.....		9,948,167
Germany.....		3,413,771
Great Britain.....		15,517,979
Holland.....		450,508
Italy.....		2,724,177
Paraguay.....		967,441
Portugal.....		42,005
Spain.....		3,315,051
United States.....		4,130,421
Uruguay.....		3,161,559
West Indies.....		85,862
Other countries.....		4,175,251
<i>In transitu</i> .....		15,078
Total.....		\$54,029,649

The values of the dutiable and of the free commodities for the year above referred to were as follows, respectively:

	IMPORTS.	
Dutiable.....	\$53,022,774	
Duty free.....	1,006,875	
Total imports.....		\$54,029,649
	EXPORTS.	
Dutiable.....	\$50,722,211	
Duty free.....	5,346,893	
Total exports.....		56,069,104
Grand total.....		\$110,098,753

If to this last amount be added \$6,351,048, the value of exports *in transitu*, the total value of the foreign commerce of the republic will be raised to \$116,449,801, against \$100,563,000 for the year immediately preceding. But this increase of \$15,886,801 is merely apparent, since the value of the exports *in transitu* for 1880 was not included in the official returns for that year.

On viewing the foregoing tables of exports and imports, it is observed that the total value of the trade of the United States with the Argentine Republic is but a little over \$8,000,000, against \$80,000,000 approximately representing the value of the Argentine commerce controlled by European countries. Frequent reference has been made in these volumes to this unfavorable state of things, with explanation of the circumstances to which it is due. As the subject is one of paramount interest to the commerce of the United States, it is deemed advisable to insert here the following remarks on "European *vs.* American Trade Methods in the Argentine Republic," contained in a report transmitted by United States Consul Baker to the Department of State at Washington:

Those nations will secure the largest share (of trade) which offer the speediest and easiest facilities for effecting exchanges; that is, for transporting cargoes, disposing of them promptly, and remitting the proceeds. This is the cause of the commanding position, with reference to the commerce of the Argentine Republic, which the great maritime nations of Europe enjoy to-day. Having products to sell and products to buy, they have labored to make such traffic easy and certain. By gradual but sure methods they have laid the foundations for a fixed and permanent trade. They have arranged, as we may say, the tools and instruments by which they can handle the largest commerce with certainty and dispatch, and at the same time with profit to all through whose hands it passes. This really has been of more concern to them than idle panegyrics on the excellence or superiority of what they had to sell; for they argued, and argued correctly, that if the people of another nation have a demand for any particular article of merchandise or manufacture, they will buy it—even though its quality may be inferior—where they can procure it with the greatest ease and receive it in the quickest time. The methods employed by them thus to secure the trade of the Argentine Republic have not been secret or concealed, but are patent to us and to all the world, and may be stated in a word. They are—

1. Regular steam communication with the Argentine Republic, whereby the receipt of merchandise can be counted on to a day. This means of intercommunication is now so extended that there is hardly a day in the week that a steamer from some European port does not arrive in the River Plate. The English have six or seven different lines; the French have three; the Germans have four; the Italians have three; the Belgians have two; the Spaniards have one; and the Dutch have one, and there is not a single maritime port of importance on the coast of Europe, or in the Mediterranean, but is connected by regular steamers with Montevideo and Buenos Ayres. The stimulus and impetus which these constantly arriving and constantly departing steamships give to trade is incalculable, and it is all directed to Europe. Sailing-vessels are no longer employed, except for the heaviest freights, such as coal, or lumber, or salt, or wines. Everything in the hardware, grocery, or dry-goods line, intended for the Buenos Ayres market, comes here by steamer; and the merchant who gives the



order by cable knows that it will be delivered here in twenty to thirty days. So he is not required to keep on hand such heavy stocks, and can take advantage of the fluctuations of prices in Europe.

2. The advantage which steam communication gives to Europe in its trade with the River Plate is greatly enhanced by the fact that the mercantile firms doing business here are, as a general thing, branches of established houses in the business centers of the Old World, or are the immediate agents, if indeed not part owners, of manufacturing establishments in England and France, thus giving the parties here a personal and double interest in the orders which go forward. They are thus enabled to obtain their goods at times and in quantities to suit the trade, accompanied by the most favorable terms and credits. I have, however, in former reports referred to this fact, and it is not necessary to enlarge upon it.

3. Another and most decided advantage which Europe enjoys is its banking facilities with the River Plate. The value of these, in the conduct of general trade, can hardly be overestimated. The labor of exchange is a most important ingredient in the business of reciprocal commerce, and certainly contributes as much to its success as rapid transportation. The receiving and remitting of money and the settling of balances are thus accomplished directly, cheaply, and without trouble.

The trade of Great Britain with the Argentine Republic is especially favored in this respect, possessing banking facilities here in the River Plate of the very first class. The "London and River Plate Bank (limited)" is an institution which has been in operation here for the last twenty years, with branches in Montevideo, Rosario, and Córdoba. It has an authorized capital of \$10,000,000, of which \$7,500,000 is paid up, with a reserve fund of \$775,000. The establishment does a general banking business of all kinds, except the issuing of circulating notes, and the branch in Montevideo even has this privilege. It does a very large and successful business. I have before me the nineteenth annual report of the directors, being for the year just closed, from which it appears that after making allowances for bad debts, adding \$100,000 to the reserve fund, and paying \$43,000 for the purchase of banking-houses abroad, they have declared a dividend of 4 per cent and a bonus of 2 per cent for the last half year, being, with the *interim* dividend paid last July, 10 per cent for the year, leaving a balance of \$40,000 to be carried to the account of profit and loss for the current year.

So great has been the success of this institution that another English banking-house (the "English Bank of the River Plate, limited") has just been established here, with an authorized capital of \$7,500,000, of which \$5,000,000 is paid up. Doing business with the same facilities and on the same principles, it promises to be equally successful.

The Italians also have a flourishing bank here (the "Bank of Italy and the River Plate"). It has a paid-up capital of \$1,500,000 and a reserve fund of \$160,000. Its business has been remarkably successful, and it is now building a magnificent banking-house in this city. I have not before me its last annual report, but the dividend, after placing a large amount to the account of the reserve fund, was 10 per cent for the year. It enjoys a large share of the public confidence.

Besides these foreign banks, I would mention the Bank of the Province of Buenos Ayres, which belongs to and is the fiscal agent of the province, with branches in Dolores, San Nicolas, Chilivcoy, Mercedes, Lobos, Salto, Azul, Baradero, Chascomus, Tandil, Vienti-cinco de Mayo, San Pedro, Pergamino, Las Flores, and several other points in the province of Buenos Ayres. It has special privileges, issues bank-notes which furnish the entire circulating medium of the province and almost of the entire republic, has close and intimate connections with all the money-centers of Europe, and does a large por-

tion of the exchange business of the country, domestic as well as foreign.

The only other public bank in Buenos Ayres is the "National Bank of the Argentine Republic." It has its charter from the national Congress, and, as it has branches at the capitals of the several provinces, it is, to a large extent, the fiscal agent of the General Government. With the late money crisis in this country it was obliged to suspend specie payments, but it has since called in and redeemed all its circulation in this province. Its notes, however, still pass current in the other provinces, and furnish the circulating medium for all parts of the republic outside of Buenos Ayres. It has now fully regained the confidence of the public, and its stock sells on the Bolsa at a large per cent premium.



BANK OF THE PROVINCE OF BUENOS AYRES.

All the establishments I have mentioned do banking in all its branches. They discount bills, make loans on negotiable securities, attend to collections, receive deposits either for fixed periods or at sight, the interest on which is regulated by the market value of money; issue bills of credit to parties traveling abroad or for the purpose of purchasing goods, transfer funds, and sell exchange on the principal cities of Europe. I may state here, as a matter of some interest, that the rates at present allowed by the banks of this city are as follows: On deposits in account-current, 3 per cent; on deposits subject to thirty days' notice of withdrawal, 3 1/2 per cent; on deposits for ninety days fixed, 4 per cent; and they charge 9 per cent on debit balances in account; discounts are conventional, according to circumstances, but generally about 7 per cent.

It will be seen from the foregoing that the nations in Europe, in competing for the trade of the River Plate, have at least three very decided advantages over the United States, to wit, regular steam communication, intimate business relations, and extensive banking facilities. These are the commercial levers of the world, and place them in a position to keep the control of the commerce of the Argentine Republic, only permitting us to supply such articles as they can not furnish, such as lumber, raw tobacco, kerosene, alcohol, sugar, and a few other articles of prime necessity, and a small but uncertain trade in furniture, hardware, cottons, drugs, paints, agricultural implements, groceries, ship-chandlery, stationery, etc., mostly received on special orders.

In considering the methods by which the commerce of the United States may be promoted, I have



already in frequent reports discussed the importance of direct steam navigation with the River Plate, considering it as an essential prerequisite to the general introduction here of American manufactures, and insisting that so long as our intercourse with the Argentine Republic continues to be through the slow, uncertain, and irregular medium of sailing-vessels, we can not expect any great or decided improvement in our trade.

I have also argued the necessity of establishing more intimate relations between our manufacturers and the merchants of the Argentine Republic, explaining the impossibility of securing a permanent trade in any given commodity by means of commercial travelers, who sell by sample and have no interest in the business of those who employ them beyond the per cent they may receive on orders secured during a flying visit here; and I have suggested the wiser plan of establishing branch houses here or arranging terms with reliable houses already established; or, in lieu of this, for the manufacturers to open agencies here, where their goods will always be found on sale in stock.

**AN AMERICAN BANK WANTED IN BUENOS AYRES.**—I have not heretofore referred to the utter absence of direct banking facilities between our own and this country. There is no doubt that this is an explanation, at least in part, of the want of that activity which characterizes a healthy and satisfactory condition of trade. I believe that the establishment of an American bank here would be the means of working a change in this respect, and especially if it was accompanied by a direct line of steamships trading with the United States. It may be a question, however, whether such an institution would at once return very large dividends. There is no doubt that, if parties could afford to wait the gradual process of changing the course of trade, or rather exchange, it would ultimately not only command success, but enjoy a long life of prosperity. The great trouble in the way is the fact that all the banking business with the United States is now transacted through English banks. New York, as a financial center, is hardly known here. Credits sent out for the purchase of River Plate hides or wool, are nearly all given on London. There is scarcely a hide or a pound of wool shipped from here to the United States the invoice of which, except in the case of special purchases, is not made out to Baring Brothers & Co., or to Brown Brothers & Co., or to some other English banking-house. And all remittances on account of sales of merchandise received from the United States are made by bills on London, or by express order, put into hides or other produce, the New York or Boston account taking the chances of a profit or loss in the shipment. A bill drawn here and payable in New York for any large amount could at present with difficulty find a purchaser here, while masters of vessels in remitting home their freight-money generally take drafts on London.

Recently, however, the American houses of A. C. Bean & Co. and G. B. Perry, drawing on Boston, and S. B. Hale & Co. and C. S. Bowers & Co., drawing on New York, have been doing some exchange business, more for accommodation than anything else. The establishment of an American bank here, with strong and well-known connections at home, would gradually make a change in the present method of conducting the American trade, and ultimately be the medium through which bills for merchandise coming from the United States, as well as bills paying for produce purchased here, would pass. Bills on the United States direct would take the place of bills on London. The advantage of a central exchange office of this kind for the American trade would soon manifest itself. Sellers would know where to sell, and buyers would know where to buy; and buyers and sellers would thus be brought together. It may be argued, that the present limited trade of the United States with the Argentine Republic would hardly justify such an institution; but, if we are to have steam

communication between New York and Buenos Ayres, the commerce between the two countries will necessarily increase and become more certain. I need not state that such a modification of our tariff as would make more possible the shipment of Argentine wools—other than carpet-wools—to the United States, would give an increased stimulus to our trade with this country, and make a demand for closer banking facilities between the two; but I feel that any suggestion of this kind would be touching upon a subject which must be considered and settled, not from an Argentine but from an American point of view, it being of paramount importance that our own home interests should be taken into account, rather than those which may affect our trade with any particular country.

I may state generally that the business prospects of the Argentine Republic are in most respects more promising than they have been for years. The Argentine national Government, during the year which has just closed, has greatly strengthened its financial position, and its credit in Europe was never better than it is at present—its bonds advancing from a discount of 10 to 15 per cent to a premium on the London Exchange; while the endeavors of the Government to increase and develop the resources of the country by means of railway extensions, the selling of its public lands, the opening of new ports, the extending of its agricultural industries, the encouragement of immigration, and generally the cultivation of the arts of peace, are more earnest, persistent, and hopeful than ever before. All these things help banking operations by increasing trade and creating commerce. In the midst of this present and prospective River Plate prosperity, it would be gratifying to see a bank here, especially representing American interests, and offering increased facilities for effecting exchanges between the two countries.

No clearer delineation of the general condition of affairs in the Argentine Republic at the commencement of 1882 could be presented than that embodied in the following extract from President Rocas's message to Congress in May of that year:

**MESSEURS. SENATORS AND DEPUTIES:** I have now for the second time the honor of presiding at the opening of your annual sessions.

The republic has already begun to advance surely and steadily, without any uncertainty as to the morrow. It now knows what it requires and whither it is going; and it has made marked progress, moral and material, during the year just ended. We have been gradually acquiring self-confidence and self-security, and are now beginning to enjoy the confidence of other peoples and to attract the attention of capitalists, scientists, industrials, and statesmen, and of those nations of the European Continent where a plethora of population is felt.

Peace within our borders has not been disturbed for a single instant. The small cloud which lowered in Corrientes disappeared of itself, and the conflict subsided within the sphere of the constitutional powers of that province.

During the general elections for new deputies, and the election for two new senators in the capital, there was ardent struggling in a few provinces; but no violent demonstration of party spirit or breach of the laws occurred in any. Here we have a proof of progressive improvement in our mode of exercising our political rights.

I have been most solicitous in the preservation of peace and tranquillity, in the belief that such was the faithful interpretation of our dearest desires and the most vital necessities of our country.

While observing a policy at once firm, frank, liberal, and circumspect, the Executive has devoted his whole attention to perfecting the administration. Much has been done in this direction; much of routine has been eradicated; many costly errors have been corrected,



and considerable sums saved the national Treasury. But a great deal still remains to be accomplished, for, to place the administration on a firm footing of order and economy is not the work of a single presidential period, but of long years of peace.

The current of immigration has continued weak, as compared with the inducements and advantages offered by our country. During the past year 32,817 immigrants have landed on our shores.\* The number, without doubt, is not flattering; but we are to bear in mind that this increase of population was altogether spontaneous, and came without either effort or sacrifice on the part of the nation. We are also to consider that these immigrants are for the most part farmers who came provided with means to settle and get to work without any assistance from the public fund, and that, consequently, they have not remained in the cities as did others before them.

Although the tide of emigration from Europe is daily growing, we shall see but a slow increase, or, perhaps, rather a diminution in the number of people seeking our shores, unless we hasten to make sacrifices by cheapening the passage, placing lands within the reach of all on easy terms, and aiding the settlers for the first few months after their arrival. Besides the United States, where European immigration has reached surprising proportions, other countries of America open their doors to these feund and vivifying currents. Mexico, with her dazzling traditions, lightens their expenses by sea and land, and makes them generous grants.

Brazil continues to follow the same plan, and as soon as the Isthmus of Panama shall have been opened up, new lands, vast and fertile, and at half the distance of ours, will be offered to the immigrant.

These facts point to the necessity for us of fostering by all available means that element of power and wealth.

It is with genuine satisfaction that I am enabled here to repeat the words of my last year's message. The republic continues in peace and friendship with all the foreign powers, and cultivates its relations therewith in accordance with the principles of reciprocal kindness.

In regard to our foreign policy, the rectitude of our conduct becomes more and more marked, and the name of the republic is gaining in consideration in the eyes of other nations.

The boundary question with Chili, so long a subject of anxiety in the public mind, has been amicably settled, as you know, and our relations with that country are now completely harmonious. But on calling to your mind an event of such paramount importance for our country, I must not omit to remind you of the names of the distinguished ministers plenipotentiary of the United States in Chili and the Argentine Republic. As you are aware, the question was at the worst when these gentlemen interposed their influence for the opening up of new channels of negotiation, and continued using it until the final solution.

It is painful to me to have to announce that the question of the Pacific, in which three friendly nations are involved, still presents a character of hostility, and is enveloped in so much uncertainty as to render it impossible to foresee the issue.

In the mean time, the voice and interests of America call for peace as a supreme necessity for the common progress and prosperity. Bloodshed must not continue forever. Humanity and civilization cry aloud for the mitigation of the evils of warfare, and more particularly in the case of peoples between whom no real grounds for antagonism exist. The Argentine Government, animated by a spirit of friendship toward the contending nations, had taken steps to offer its mediation conjointly with the Government of Brazil and of the United States, should these accept the proposal, with the aim of a solution of the conflict on equitable and fitting terms. The general tenor of our

communication on the subject met the approval of the Brazilian Government. Just then, however, the United States interposed, and it was deemed prudent on our part to suspend further action in order not to interrupt the course of the negotiations set on foot.

The Argentine Government, desirous of entering into closer relations with Colombia and Venezuela, sent a minister resident to their respective governments, both of whom received him with marks of true sympathy and friendship toward our country.

We have received an invitation from the United States to the Congress which is to assemble at Washington in November of the present year, composed of two representatives from each of the nations of America, and in which will be discussed questions of the greatest moment to all those peoples.

The Continental Exhibition, due to the initiative of the Industrial Club, and which you aided with a subsidy, was solemnly inaugurated on March 15th, and I believe I may say, with genuine satisfaction, that its success has exceeded the most sanguine hopes of all concerned. The opinion of natives and foreigners has done ample justice to the indefatigable efforts of all those persons who contributed to the realization of that important competitive display; and our country may look with honest pride on the rapid improvement achieved in all branches of industry. Every country of America and many of those of Europe have been represented here in the department of machinery, and it is only to be regretted that the brief space of time allotted for the organization of the exposition did not permit of their bringing a larger number of exhibits. Nevertheless, we owe a debt of gratitude to those who so willingly, and spite of every difficulty, came forward on our invitation.

Thanks to the uninterrupted development of the country's wealth, legitimate confidence in the public tranquillity, and the faithful collection of imposts, the national income goes on progressively increasing. The revenue for 1881 was upward of twenty-three and one-half millions of hard dollars; and the receipts for the first quarter of the present year bespeak an approximation to twenty-six millions for 1882.

Our foreign trade has increased 15 per cent as compared with that for 1880, the imports having been of the value of \$54,774,204, and the exports \$56,896,194. The trade *in transitu* was of the value of \$5,860,609. Thus our foreign trade for 1881 was of the aggregate value of \$116,431,007, or \$14,245,169 in excess of that for 1880.

Eleven thousand six hundred and ninety vessels entered at our ports gave place to a movement of 2,579,361 tons of merchandise between exports and imports; and the traffic shows an increase of 336,779 tons as compared with that for 1880.

In the present year our commerce has begun under still more favorable auspices, the dutiable exports for the first quarter having been of the value of \$22,355,091, and the dutiable imports of the value of \$13,243,965. Hence, the foreign trade for the period first named has been of the aggregate value of \$35,599,056, exclusive of transit trade and commodity free of duty. For the continuance and permanence of such a flattering state of things, all that is necessary is a well-organized administration governed by prudent laws. I can not but express regret that the budget for the present year has been approved with a notable deficit as compared with the estimated amount of the revenue. For this reason, all my endeavors have tended to reduce the expenditures, without prejudice to the public service, in order that they may not be in excess of the income at the end of the fiscal year.

The foreign branch of the national debt increased by \$25,000,000 in 1881, owing to the loan negotiated for the extension of the government railways, and the two provincial loans of Buenos Ayres passed to the debit of the nation in virtue of the *Ley de la Capital*. Yet the total national debt on the 31st of last December only reached the sum of \$79,401,141, payments on

\* See p. 23.



that debt having been made in 1881 to the amount of \$3,211,449. The regularity with which the service of all our public debts has been attended to, as well as the punctual payment of the relatively high rate of interest which they bear, has kept up the most of our bonds to about par, while some of them have been and are still quoted at a premium. This flattering state of things, besides aiding us to secure the conversion of our public debt into another at a lower rate of interest and with a smaller sinking fund, will pave the way to a reduction, and ultimately to the complete abolition (our constant aim) of export duties.

In my previous message I remarked that "every effort on the part of the Honorable Congress to free the country of a forced currency would be amply repaid." Thanks to the law which you promulgated, to the decision of the Executive to remove the difficulty, to the confidence in the public peace, to the rapid development of our commercial interests now to be observed on an extensive scale throughout the country, and to the prudent measures taken by the government of Buenos Ayres, the paper of the Provincial Bank of Buenos Ayres has been at par since the 1st of December last.

Thanks to the same causes, new private banks have been established with foreign capital, while those already existing have materially improved in vitality and credit.

The creation of a national bank would not be in contradiction either to the antecedents of our country, the letter of the Constitution, or the experience which teaches us that the current of private banking institutions is as yet too feeble to carry the facilities of capital and credit to all parts of the republic.

In regard to the question of public instruction, which has been one of our chief preoccupations, I have to mention an event of importance for the future of education. A Teachers' Congress has been commenced, and is now approaching the termination of its session. To the call of the Argentine Republic prominent educationists, both foreign and native, responded cordially. Distinguished men of letters, representing the United States, Brazil, Uruguay, Paraguay, Bolivia, and the Central American republics, take their seats in the Congress as well as the most notable of our own professors. Whatever the nature of the solutions arrived at by that assembly, in regard to rules, principles, and general systems of education, the real and immediate result will be that of having brought the South American peoples together for the most noble of purposes—the education of the people, and of elevating and dignifying the men who devote themselves to the apostolate of teaching. . . .

In the belief that I have drawn a faithful and accurate sketch of the situation of the country, and the administrative movement in the year just expired, and invoking the Divine protection for your deliberations, I declare the legislative period of 1882 to be open.

JULIO A. ROCA.

BUENOS AYRES, May 12, 1882.

**ARKANSAS. STATE GOVERNMENT.**—The State officers during the year were as follows: Governor, Thomas J. Churchill (Democrat); Secretary of State, Jacob Frolich; Treasurer, William E. Woodruff; Auditor, John Crawford; Attorney-General, C. B. Moore; Superintendent of Public Instruction, J. L. Denton; Land Commissioner, D. W. Lear. Judiciary—E. H. English, Chief-Justice; W. M. Harrison and John B. Eakin, Associate Justices.

**AUDITOR'S ACCOUNTS.**—In March, 1881, charges having been made that Governor Churchill was in default in his accounts as State Treasurer, which office he had held from November 13, 1874, to January 12, 1881, the State Senate appointed a committee of investi-

gation. On the 24th of December, 1881, the committee made a statement of deficits for the purpose of giving the late Treasurer an opportunity of explanation. That statement was as follows:

Swamp land scrip .....	\$110 00
City railroad certificates .....	12,772 21
City and county bonds and coupons .....	18,164 80
County scrip .....	563 81
United States currency .....	69,742 88
State scrip .....	63,468 11

Total.....\$164,820 81

The committee remained in session, receiving such explanations as Mr. Churchill chose to give, until May 20, 1882, when its lengthy report was filed in the office of the Secretary of State. This report contains the following amended statement of deficits:

United States currency.....	\$109,888 46
State scrip.....	24,617 52
Swamp-land warrants.....	110 00
County scrip.....	563 81
County and city bonds.....	1,894 86
City interest certificates.....	2,163 62

Total.....\$139,128 27

A deficit was also shown on the part of the Auditor. Governor Churchill referred the report to the Attorney-General in a letter dated May 27th, in which he said, among other things:

Under all the circumstances surrounding this matter, I have deemed it my duty to refer this report to you, with the request that you look into the same and take such course in regard thereto as your official duty may require.

As I am personally interested in so much of the report as relates to the Treasurer's books, I take occasion to say that, while leaving to the proper tribunals to determine the committee's authority in the premises, I do, nevertheless, most solemnly protest against its mode of procedure, and allege my full confidence that when a legal investigation is had into the affairs of the Treasurer's office during my entire term of service, it will appear that all moneys for which my securities and myself were responsible have been fully accounted for according to law. A brief experience before the committee convinced my attorneys that it was due to myself and securities that I should let the committee take its own course, and await a lawful and proper investigation of my accounts as Treasurer.

**RAILROAD AID BONDS.**—In March a bill was filed in the United States Circuit Court for the Eastern District of Arkansas, in the suit of William H. Tompkins (of New York) against the Little Rock and Fort Smith Railroad Company, which raises the question of the liability of the railroad companies for the "railroad aid bonds" issued to them by the State. The complaint may be summarized as follows: 1. That the bonds were issued by the State with the distinct understanding that the roads were to pay them. 2. That, notwithstanding the road has changed its name, the liability still exists. 3. That, although the Supreme Court of the State of Arkansas has declared the act under which the bonds were issued unconstitutional, yet the roads received the bonds, sold, indorsed and received the money for them—they became commercial paper, and therefore the roads are responsible for their payment.

The railroad company entered a general de-



murrer to the bill, alleging as grounds, among others, that the present owners of the road are not liable for the payment of the State aid bonds, because they are purchasers without notice; and that the act of 1868 is void, under which the bonds were issued.

STATISTICS.—The mileage of completed railroads in the State at the close of the year was stated as follows:

*Gauge, four feet eight and a half inches—standard.*

	Miles.
St. Louis, Iron Mountain, and Southern Railroad...	465½
Little Rock, Mississippi River, and Texas Railway...	170
Little Rock and Fort Smith Railway.....	165
Memphis and Little Rock Railway.....	185
Kansas City, Springfield, and Memphis Railroad....	140
St. Louis and San Francisco Railway, about.....	100
Arkansas and Louisiana Railway.....	40
Iron Mountain and Helena Railroad.....	43
Total.....	1,262½

With narrow (or three feet and three feet six inches) gauge, there are the—

	Miles.
Texas and St. Louis Railway.....	416
Arkansas and Midland Railway.....	50
Hot Springs Railroad.....	25
Cotton-Plant and Brinkley Railroad.....	11
Searcy and West Point Railroad.....	8½
Total.....	510½
Total mileage.....	1,773

More than one fourth of this mileage is owned by the Gould syndicate. It is estimated that between three and four hundred miles additional will be completed in 1883. The Iron Mountain road enters the State near its northeast corner and passes out at the southwest. From this line the following branches have been projected: the White River Branch, starting two miles north of Newport, and running northwest through the White River Valley; the Memphis Branch, from Newport through Jackson, Cross, and Crittenden Counties; the Crowley Ridge Branch, to be extended south from Forest City, its present terminus, to Alexandria, La.; the Arkansas Valley Branch, one hundred and sixty miles long, from Beebe, White County, west to Fort Smith, crossing the Little Rock and Fort Smith road at Conway, Faulkner County; the Louisiana Branch, from Gurdon, Clark County, southeasterly, now in operation to Camden, the principal town of Southeastern Arkansas; another branch farther to the southwest, from Hope to Magnolia, Columbia County, thirty-five miles, to be extended into Louisiana.

The following table gives the population of the State by counties and race, according to the census of 1880:

COUNTIES.	POPULATION.			COUNTIES.	POPULATION.		
	Aggregate.	White.	Colored.		Aggregate.	White.	Colored.
Arkansas.....	8,085	4,971	3,067	Lee.....	18,288	4,188	9,150
Ashley.....	10,156	5,026	5,180	Lincoln.....	9,255	4,212	5,040
Baxter.....	6,004	5,959	45	Little River.....	6,404	3,064	3,335
Benton.....	20,328	20,167	123	Logan.....	14,885	13,901	984
Boone.....	12,146	12,058	88	Lonoke.....	12,146	8,143	4,003
Bradley.....	6,285	4,075	2,210	Madison.....	11,455	11,331	124
Calhoun.....	5,671	8,583	2,088	Marion.....	7,907	7,564	43
Carroll.....	13,387	13,272	00	Miller.....	9,919	5,324	4,595
Chicot.....	10,117	1,563	8,495	Mississippi.....	7,332	4,671	2,654
Clark.....	15,771	10,567	5,203	Monroe.....	9,574	4,365	5,209
Clay.....	7,213	7,191	22	Montgomery.....	5,729	5,471	258
Columbia.....	14,090	8,557	5,503	Nevada.....	12,959	9,236	3,722
Conway.....	12,755	9,546	3,206	Newton.....	6,129	6,115	5
Craighead.....	7,087	6,776	261	Onachita.....	11,753	5,594	6,259
Crawford.....	14,740	13,332	1,392	Perry.....	8,372	8,072	800
Crittenden.....	9,415	1,899	7,516	Phillips.....	21,262	5,444	15,809
Cross.....	5,050	3,261	1,789	Pike.....	6,945	5,951	392
Dallas.....	6,505	4,299	2,206	Poinsett.....	2,192	1,902	290
Desha.....	8,973	2,452	6,514	Polk.....	5,857	5,792	61
Dorsey.....	8,370	6,041	2,329	Pope.....	14,322	13,413	909
Drew.....	12,231	6,472	5,759	Prairie.....	8,435	5,691	2,734
Faulkner.....	12,786	11,368	1,418	Pulaski.....	32,616	17,667	14,921
Franklin.....	14,951	14,455	493	Randolph.....	11,724	11,097	627
Fulton.....	6,720	6,654	86	St. Francis.....	8,389	4,921	3,467
Garland.....	9,023	7,457	1,562	Saline.....	8,933	7,556	1,366
Grant.....	6,135	5,629	556	Scott.....	9,174	9,085	83
Greene.....	7,480	7,405	75	Searcy.....	7,273	7,262	16
Hempstead.....	19,015	9,533	9,421	Sebastian.....	19,560	17,970	1,541
Hot Spring.....	7,775	7,030	745	Seyler.....	6,192	5,083	1,096
Howard.....	9,917	7,409	2,508	Sharp.....	9,047	8,371	176
Independence.....	13,058	16,703	1,332	Stone.....	5,059	4,984	99
Izard.....	10,357	10,635	222	Union.....	13,419	6,935	6,484
Jackson.....	10,377	8,118	2,763	Van Buren.....	9,565	9,447	118
Jefferson.....	22,386	5,331	17,011	Washington.....	23,344	22,394	944
Johnson.....	11,565	11,073	491	White.....	17,794	15,761	2,032
La Fayette.....	5,730	2,116	3,614	Woodruff.....	8,646	4,163	4,483
Lawrence.....	8,732	8,315	467	Yell.....	13,852	12,733	1,113
The State.....					802,525	591,531	210,666

Included in the aggregate are 133 Chinese and 195 Indians; 416,279 were males and 386,246 females, 792,175 natives and 10,380 of foreign birth. There were living in the United States, 520,740 natives of Arkansas,

333,622 white and 137,118 colored. Of persons ten years of age and upward, 153,229, or 23·8 per cent, were unable to read, and 202,015, or 38 per cent, were unable to write, of whom 97,990, or 25·5 per cent of that class,

were native whites, and 103,473, or 75 per cent of that class, were colored. There were 136,150 white and 46,827 colored males twenty-one years of age and over. The yield of cotton, according to the census, was 603,256 bales; of corn, 24,156,417 bushels; of oats, 2,219,822; of wheat, 1,269,730. There were on farms, 146,333 horses, 87,082 mules and asses, 25,444 working oxen, 249,407 milch-cows, 433,392 other cattle, 246,757 sheep, and 1,565,098 swine. The number of manufacturing establishments was 1,202, having a capital of \$2,953,130, employing 4,556 hands; value of materials used, \$4,382,080; value of products, \$6,756,159.

**POLITICAL CONVENTIONS.**—The Christian Temperance Union of Arkansas met in Little Rock in January, and pronounced in favor of a prohibitory liquor law. A union was effected of this body with the Prohibition Alliance of Arkansas, under the name of the Christian Temperance and Prohibition Union of Arkansas.

The Democratic State Convention met in Little Rock on the 15th of June, and remained in session three days. The following is the platform adopted:

*Whereas*, In every republican form of government, having political parties, the party in power by the suffrage of the people is the one which is responsible for the public welfare; and,

*Whereas*, The Democratic party is in power in Arkansas, and the people therefore look to it to guard their interests and to take up all questions in which they are interested, and to settle them in such manner as best to subserve the public weal; and,

*Whereas*, The question of a proper disposition of our fraudulent debt, involving upward of thirteen millions of money, is one of greater magnitude and of deeper concern to the people of Arkansas, and to their children after them, than any other question that ever presented itself to their consideration: therefore,

*Resolved*, That it is the duty of the Democratic party to take up this great question, and to settle it in accordance with at once the best interests of the State and the wishes of her citizens.

*Resolved*, That it is the duty of the next Legislature to submit an amendment to the Constitution of the State of Arkansas which will forever prohibit the Legislature from the payment, compromising, funding, or otherwise recognizing the fraudulent railroad aid, levee, or Holford bonds of the State of Arkansas, or claims, or pretended claims, upon which they are based.

*Resolved*, That we demand that the State Legislature shall, at the earliest practicable period, provide for funding and paying interest upon the just debt of the State, and providing a sinking-fund to ultimately extinguish it.

*Resolved*, That we demand strict accountability of all State officers, and that all demands due the State from every officer, person, or body corporate, be speedily enforced.

*Resolved*, That we are in favor of the education of the masses by means of public schools, free to all.

*Resolved*, That we do reaffirm and approve the principles announced and promulgated by the Democratic party of the United States at Cincinnati in 1880.

*Resolved*, That we favor immigration, and recommend to the Legislature to adopt all practical means to bring labor and capital to the State.

*Resolved*, That we return thanks to the General Government for its prompt action, during the late great flood, in providing aid for the destitute and the home-

less, which, though a bounden duty to its suffering people, was made particularly gratifying in consequence of its speedy and impartial distribution.

The ticket nominated contained the following names: For Governor, James H. Berry, of Benton County; for Secretary of State, Jacob Frolich, of White County; for Auditor, A. W. Files, of Ashley County; for Treasurer, W. E. Woodruff, Jr., of Pulaski County; for Associate Justice of the Supreme Court, W. W. Smith, of Phillips County; for Attorney-General, C. B. Moore, of Pulaski County; for Chancellor, D. W. Carroll, of Jefferson County; for Chancery Clerk, J. W. Callaway, of Ouachita County; for State Land Commissioner, W. P. Campbell, of Woodruff County; for Superintendent of Public Instruction, J. L. Denton, of Phillips County; for Congressman-at-large, C. R. Breckinridge, of Jefferson County.

The candidate for Governor was born about 1840. He entered the Confederate army, and lost a leg at the battle of Corinth. He afterward taught school and studied law. In 1868 he was elected to the Legislature. In 1869 he moved to Benton County and practiced his profession with success. In 1872 he was again elected to the Legislature, and was chosen Speaker of the House at the extra session called by Governor Baxter in 1873. In 1876 he was a delegate to the State Convention, and was made chairman. In 1878 he was elected judge in the first judicial district. He was nominated for Governor by acclamation, a circumstance that had never before occurred at a Democratic Convention in Arkansas.

The Greenback State Convention met in the same city on the same day, and presented a ticket headed by Rufus K. Garland, of Nevada County, for Governor. The convention, besides adopting the usual resolutions, pronounced in favor of the Fishback amendment to the State Constitution, and of holding the election of State officers on the same day as the congressional election.

The Republican State Convention met in Little Rock on the 6th of July, and on the following day completed its ticket. One hundred and fifty delegates were present, all parts of the State being represented. Colonel W. D. Slack was nominated for Governor. The other nominees were as follows: For Secretary of State, A. A. Tufts, of Ouachita County; for County Auditor, J. M. McClintock, of Prairie County; for Treasurer, Charles A. Waterhouse, of Phillips County; for Associate Justice of Supreme Court, William May, of Yell County; for Attorney-General, Thomas Gibson, of Yell County; for Chancellor, W. A. Monroe, of Jackson County; for Chancery Clerk, J. T. Penn, of Boone County; for State Land Commissioner, John H. Johnson, of Woodruff County; for Superintendent of Public Instruction, R. H. Param, of Pulaski County. No nomination was made for Congressman-at-large, that matter being left to the



State Central Committee, which subsequently named C. E. Cunningham. The platform adopted arraigns the Democratic party for robbing the school-fund, for robbing the State Treasury of nearly \$250,000, and for various other acts entailing evil consequences.

**ELECTION RETURNS.**—At the election, on the 4th of September, the Democratic ticket was elected. The vote for Governor was as follows: Berry, 87,675; Slack, 49,352; Garland, 10,142. The vote on the liquor-license question was 78,889 for license, and 45,041 against. Only twelve counties (Ashley, Columbia, Franklin, Grant, Johnson, Logan, Madison, Marion, Pope, St. Francis, Washington, and Woodruff) voted against license. The Senate consists of 27 Democrats, 2 Republicans, and 2 Greenbackers; the House, of 78 Democrats, 13 Republicans, and 2 Greenbackers.

The following were the Democratic nominees for district Congressmen: First District, Poindexter Dunn, of St. Francis County; Second District, James K. Jones, of Hempstead County; Third District, John H. Rogers, of Sebastian County; Fourth District, Samuel W. Peel, of Benton County. They were elected on the 7th of November over their opponents. The following is the vote: First District, Dunn, 12,496; opposition, 719. Second District, Jones, 14,831; J. A. Williams, 11,475; others, 367. Third District, Rogers, 10,522; M. W. Benjamin, 7,840. Fourth District, Peel, 5,657; others, 1,240. Congressman-at-large, Breckinridge, 43,327; C. E. Cunningham, 21,394.

**MISCELLANEOUS.**—The University of Little Rock, a Methodist institution, was opened during the year. Eureka Springs has assumed importance as a health resort. In the spring the Mississippi Valley was visited by unusually destructive floods, from which the towns of Helena and Arkansas City suffered severely. A State Bar Association was organized in May. At the close of the year the new insane asylum, about three miles from Little Rock, had been completed.

**ARMY OF THE UNITED STATES.** The expenditures of the War Department for the fiscal year ending June 30, 1882, were \$45,349,319; the appropriations for the fiscal year ending in 1883 were \$55,662,420; and the estimates for the fiscal year ending in 1884 amounted to \$38,897,620. Seven thousand three hundred and forty-one enlistments had been made during the year, while 3,721 desertions had taken place. The necessity of providing some remedy for the frequency of desertions, which is not only very expensive, but is very hurtful to the morale of the Army, was apparent. The Secretary of War suggested that a partial remedy might be found in restoring the standard of pay to what it was in 1865, or to sixteen dollars a month for a private soldier, and a proportionate amount for each non-commissioned officer. The Quartermaster's Department having had a balance of \$1,705,296 at the beginning of the fiscal year, and having

received appropriations of \$11,923,385, returned at the close of the year a balance of \$1,182,239. One hundred and nineteen new buildings had been authorized, at an estimated cost of \$175,950, at military posts in twenty different States and Territories; repairs to military buildings throughout the country had cost, it was estimated, \$428,508; \$4,899 had been expended on account of buildings for school and religious purposes; and \$7,494 had been applied to the construction and repair of hospitals. The Ordnance Department had on hand 53,542 small-arms, as a reserve supply, the number showing an increase of 16,000 during the year. The Springfield breech-loading arm still continued to give satisfaction, and was believed to have no superior as a single breech-loader for troops, and to be destined to hold its place till it is superseded by a magazine-gun. The Paymaster-General accounted for the receipt and expenditure in his department of \$15,132,245, without loss, and reported that the deposit system, which had been instituted for the benefit of enlisted men, was tending to encourage habits of economy and to check desertion. During the ten years that the system had been in operation, \$3,813,081 had been deposited by the men, and \$2,766,613 drawn out by them, leaving \$1,046,468 still on deposit. The number of deaths of soldiers during the year had been 250, of which 161 were from disease, and 89 from wounds, accidents, and injuries. The whole number of deaths was equivalent to 10 per thousand of the mean strength of the force. The proportion of fatal results to cases treated was 1 to 161. The Artillery School at Fortress Monroe, and the new School of Application for Infantry and Cavalry at Fort Leavenworth, were serving a most useful purpose. Their cost is not more than that of garrisons of the same size, "and they are, in fact, only large posts, in which every officer and soldier is being, by practice, better fitted for his duties." The Department of West Point had been abolished by the operation of changes in the commands of the various departments, and the Military Academy at that place had been, at the beginning of the current academic year, restored to its former position under the law. A good account has been given of the condition of discipline in the Academy. The report of the Adjutant-General represented that interest in the militia was increasing in many States. Whenever it was requested, the Department sent officers of the Army to the State encampments, to inspect them, and afford such assistance as might properly be given. A board, authorized by a previous act of Congress, had sat for fifteen months—from July 5, 1881, to September 30, 1882—in the examination of guns, and submitted its report on the latter day. Forty guns on thirteen different systems were tested by it, and six selected from the number as best enduring the trials were subjected to severe supplementary tests. The three of the latter number that stood all

the tests most successfully and satisfactorily were recommended as suitable for the service. They are, in the order of their determined merit, the Lee, the Chaffee-Heece, and the Hotchkiss guns, and represent the different systems of the detachable and fixed magazines. Troubles with Indians have occurred during the year only in Arizona and the southwestern part of New Mexico, where the Apaches had made disturbances. The military force in the region had been increased, and no further trouble of moment was apprehended. The Secretary approved the recommendations of the General and the several Department officers, that the limit of the enlisted strength of the Army be fixed at 30,000 instead of 25,000 men, as now established, with no increase in the number of officers; that measures be taken into consideration for the erection of permanent and comfortable posts at important strategic points, to take the place of hastily and cheaply built posts, which, having served their purpose as pioneer outworks, might be abandoned; that provision be made in the Articles of War for the designation of some officer at each garrison or post to try and punish soldiers for minor offenses, so as to avoid numerous and cumbrous courts-martial; that regulations be provided for such stated exchanges of stations by regiments, that officers and men at the frontier posts may be assured that they will, in their turn, be transferred to points nearer the more thickly-settled parts of the country; that the prohibition of the payment of mileage to officers traveling on land-grant railroads be repealed; that measures be taken immediately for strengthening the sea-coast defenses of the country, and particularly for connecting torpedo-lines with the instruments, which must be placed within the fortifications on shore, used for firing them; that the strength of the Engineer Battalion be raised to 520 men; and that the Weather Bureau be made a distinct organization, separate from the Army, and maintained by separate appropriations.

**ASTRONOMICAL PHENOMENA AND PROGRESS.** DR. SIEMENS'S NEW THEORY OF THE SUN.—An interesting paper on the conservation of solar energy was read before the Royal Society of London by Dr. C. William Siemens, of England, on the 2d of March, 1882. In the May number of the "Nineteenth Century" the views of the distinguished author are stated more at length, in an article which has attracted very general attention. After pointing out the facts that the amount of heat poured down annually upon the surface of our earth is a million times greater than that producible by all the coal raised, which is estimated at 280,000,000 tons a year; that the earth intercepts only  $\frac{1}{2230000000}$  part of the heat radiated by the sun; and that, if coal were consumed in the most perfect manner at the sun's surface, the combustion of the annual produce of all the coal-mines of the earth would supply the solar radiation for no more

than  $\frac{1}{400000000}$  of a second, Dr. Siemens proceeds:

Notwithstanding this enormous loss of heat, solar temperature has not diminished sensibly for centuries, if we neglect the periodic changes, apparently connected with the appearance of sun-spots, that have been observed by Lockyer and others, and the question forces itself upon us, how this great loss can be sustained without producing an observable diminution of solar temperature, even within a human lifetime.

Among the ingenious hypotheses intended to account for a continuance of solar heat is that of shrinkage, or gradual reduction, of the sun's volume, suggested by Helmholtz. It may, however, be argued against this theory that the heat so produced would be liberated throughout its mass, and would have to be brought to the surface by conduction, aided, perhaps, by convection; but we know of no material of sufficient conductivity to transmit anything approaching the amount of heat lost by radiation.

Chemical action between the constituent parts of the sun has also been suggested; but here, again, we are met by the difficulty that the products of such combination would, ere this, have accumulated on the surface, and would have formed a barrier against further action.

These difficulties led Sir William Thomson to the suggestion that the cause of maintenance of solar temperature might be found in the circumstance of meteorites, not falling upon the sun from great distances in space, as had been suggested by Mayer and Water-ton, but circulating with an acquired velocity within the planetary distances of the sun, and he shows that each pound of matter so imported would represent a large number of heat-units, without disturbing the planetary equilibrium. But, in considering more carefully the enormous amount of planetary matter that would be required for the maintenance of the solar temperature, Sir William Thomson soon abandoned this hypothesis for that of simple transfer of heat from the interior of a fluid sun to the surface by means of convection-currents, which latter hypothesis is at the present time supported by Professor Stokes and other leading physicists.

After designating certain facts which seem opposed to the theory of Helmholtz, Dr. Siemens proposes a new hypothesis by which, he claims, the objections to the gravitation theory may be avoided, and yet the conservation of solar energy accounted for. The principal points in this hypothesis are:

1. That stellar space is everywhere filled with something more substantial than the luminiferous ether; or that hydrogen, oxygen, nitrogen, carbon, and some of their gaseous compounds, in a highly rarefied condition, are universally diffused. The existence of large quantities of matter in the inter-sidereal spaces is demonstrated, in fact, by the fall of meteors and meteoric stones.

2. The attraction of the sun is constantly producing an inward flow of this cosmical matter to the solar surface, and, as the central orb of our system rotates with a tangential velocity of 1.25 mile per second, the effect of such motion on the inflowing matter would be similar to the mechanical action of a fan, "drawing it toward himself upon the polar surfaces, and projecting it outward in a continuous disk-like stream from the equatorial surfaces."

3. During the gradual inflow of hydrogen, oxygen, and hydro-carbons, these substances



pass from their condition of extreme rarity and intense cold to that of greater compression and higher temperature, until reaching, or nearly reaching, the sun's surface, they ignite, giving rise to a great development of heat. The results of combustion—aqueous vapor and carbonic acid—will be borne by the centrifugal force toward the solar equator, and thence thrown outward into space.

4. According, then, to Dr. Siemens's hypothesis, matter is brought inward to the sun in a dissociated condition; produces intense heat by its combustion at the solar surface; is then, in a recombined state, projected into space by the centrifugal force at the solar equator, again to undergo the process of dissociation. The indefinite continuance of these alternate processes is therefore an essential postulate in Dr. Siemens's hypothesis.

The theory here outlined may yet encounter adverse criticism. The high standing, however, of its distinguished author and the ability with which his views have been presented and sustained have secured the earnest attention of the scientific public.

**SUN-SPOTS AND AURORAS.**—The number of sun-spots has been constantly increasing since 1878; and the maximum reached in 1882 has indicated an extraordinary degree of solar activity. The observations of the year have afforded, moreover, a remarkable confirmation of the theory that a connection of some kind exists between sun-spots, auroras, and terrestrial magnetism. The size of some spots seen during the year was enormous. On the 13th of April one appeared on the eastern edge of the sun which, before it reached the center of the disk, attained a magnitude nine times greater than the earth's entire surface. On the 14th of April several small spots broke out a little in advance of the great one. These rapidly increased in size, so that on the 18th three spots could be seen at the same time by the naked eye—a fact entirely unprecedented. Precisely at the time of this great solar activity—viz., April 16th—the most brilliant aurora of recent times was seen throughout the United States, while a violent magnetic storm was raging in England and over the north of Europe.

**TOTAL ECLIPSE OF MAY 17TH.**—The expedition sent to Egypt by the British Government, to observe the total eclipse of May 17th, was eminently successful. At the meeting of the Royal Society, on June 15th, Mr. Lockyer reported the results obtained by Dr. Schuster and himself, with their assistants, Messrs. Woods, Lawrence, and Black. The duration of totality was but seventy-two seconds; yet in this short time three photographs were taken which show the corona to have had the same form as that of 1871, but to have differed in appearance from those of 1878 and 1867. It was accordingly inferred that the corona varies with the sun-spots; the eclipses of 1871 and 1882 having occurred at or near the maximum of solar activity, and those of 1867 and

1878 at the minimum. The unexpected discovery of a comet close to the sun will again be referred to.

**SOLAR PHENOMENA OBSERVED AT GREENWICH.**—The new Astronomer Royal, Mr. W. H. M. Christie, presented his first annual report to the Board of Visitors on Saturday, June 3, 1882. It is stated in this report that—

The sun's chromosphere had been examined with the half-prism spectroscop on thirty-six days, and on every occasion prominences were seen. On one day a detailed examination of the whole spectrum of the chromosphere was made at twenty-four points of the sun's limb. Several prominences have shown great changes in the course of two or three minutes, and large displacements or contortions of the bright lines, indicating very rapid motions of approach or recession, have been noted. In particular, a prominence examined on May 13, 1882, was observed to rise through a space of about 30' in less than two minutes, being at the rate of one hundred and ten miles a second, while the C line showed a displacement toward the red, gradually increasing from 14 to 11.4 tenth-metres, corresponding to a motion of recession increasing in two minutes from thirty-six to three hundred and thirty miles a second.

As observed at Greenwich, the sun's disk was found free from spots on only two days during the year ending May 20, 1882.

In a communication to "Nature," dated October 5, 1882, Mr. Christie, the Astronomer Royal, gives a statement of facts in regard to the simultaneous occurrence of large and numerous sun-spots, a magnetic storm, and a brilliant aurora borealis on the 1st and 2d of October. The largest sun-spot of this date covered an area five times greater than the earth's surface.

**NEW METHOD OF FINDING THE SUN'S DISTANCE.**—Mr. T. S. H. Eyttinge, of Cainsville, Canada, has suggested a new method of determining the velocity of light, or, what amounts to the same thing, of finding the distance of the sun from the earth. The rate at which light travels has been ascertained approximately by observations of Jupiter's satellites, and also by carefully conducted optical experiments. Mr. Eyttinge proposes a third method, namely, by observations of variable stars. It is well known that certain variables of short period have regular intervals of fluctuation. If, then, these intervals be accurately determined, and also the changes produced in their values by the earth's orbital motion, we shall have the time which light requires to cross the earth's orbit. Mr. Eyttinge says he has tested his method, and that he hopes in due time to make known his results.

**PROFESSOR LANGLEY'S MOUNT WHITNEY OBSERVATIONS.**—Professor Langley's experiments at the Alleghany Observatory having rendered it probable that the amount of heat radiated by the sun had been underestimated by previous observers, it became desirable to verify these results by simultaneous observations at the base and summit of a very high mountain. Accordingly, with the co-operation of General W. B. Hazen, the head of the United States

Signal Service, an expedition for observation was sent to Mount Whitney, in the Sierra Nevada of Southern California. In "Nature" for August 3, 1882, Professor Langley, after giving an interesting account of the journey from Pittsburg to Lone Pine at the foot of the Sierras, and of the laborious ascent of Mount Whitney, makes a preliminary report of the results derived from simultaneous observations at points differing more than two miles in altitude. He says:

It appears probable that the true solar constant is one half greater than that determined by Pouillet and by Herschel near the sea-level, and even greater than the recent values assigned by M. Violle. The true value, it is believed, will be shown by the data when published to be larger than those hitherto accepted.

Of more general interest, perhaps, is the conclusion as to the limit of that cold which increases under full sunshine as we ascend above our atmosphere. "What," it may be asked, "would the temperature of the soil be on a mountain-top rising wholly above the air, or what the temperature of the sunward hemisphere of the earth, if the present absorbing atmosphere were wholly withdrawn?" The personal experiences already alluded to may prepare the general reader for the paradoxical result that, if this atmosphere were withdrawn, the temperature would greatly fall, though under a materially greater radiant heat.

The student of the subject is aware that this conclusion follows from the fact that the loss by radiation into space as the atmosphere is withdrawn is much more rapid than the gain by direct solar heat, but even he may not perhaps be prepared for the extent of the fall.

The original observations, which will be given at length, lead, in the writer's opinion, to the conclusion that in the absence of an atmosphere the earth's temperature of insolation would at any rate fall below  $-50^{\circ}$  Fahr., by which it is meant that (for instance) mercury would remain a solid under the vertical rays of a tropical sun were radiation into space wholly unchecked, or even if, the atmosphere existing, it let radiations of all wave-lengths pass out as easily as they come in. Remembering, then, that it is not merely by the absorption of our air, but by the selective quality of this absorption, that the actual surface temperature of our planet is maintained, we see that, without this comparatively little-known function, it appears doubtful whether, even though the air supported respiration and combustion as now, life could be maintained upon this planet.

These conclusions do not, in the writer's opinion, depend upon the Mount Whitney observations alone, but exist implicitly in the results of previous observers, who have, however, not apparently drawn them, with the exception, perhaps, of Mr. Ericsson, who has observed that the surface of the airless moon must remain cold even in sunshine.

We see, if these results be true, that the temperature of a planet may, and not improbably does, depend far less upon its neighborhood to, or remoteness from, the sun, than upon the constitution of its gaseous envelope, and indeed it is hardly too much to say that we might approximately indicate already the constitution of an atmosphere which would make Mercury a colder planet than the earth, or Neptune as warm and habitable a one.

It must at the same time be admitted that our information as to the special constituents of our own air, which are chiefly here concerned, is still imperfect, though the observations made at Mount Whitney upon the selective action of that undoubtedly prominent agent, water-vapor, will, it is hoped, add somewhat to our knowledge.

In the same connection it may be added that the writer's investigations have led him to the conclusion that the temperature of space, so called, must at any

rate be lower than that assigned by Pouillet (if we accept the received values for that of the absolute zero), and in this case the temperature of the earth's surface, in the absence of the quality of selective absorption in our air, will be yet lower than that here given.

AUROSAS.—Auroral displays in 1882 were more brilliant as well as more numerous than had been observed for several years. Some of the brightest occurred at the following dates:

April 16th–17th. A magnificent aurora was seen throughout the United States, whenever the sky was clear, from nine o'clock on the evening of the 16th till daylight on the morning of the 17th. The varying aspects of the phenomenon are described in the "August Observatory" by Professor Larkin, of New Windsor, Ill., who watched it from its first appearance till after four o'clock the next morning:

From midnight to 1 A. M., April 17th, the phenomenon was at its height, the whole northern heavens from the horizon to the equator being striped and banded with varying streams flashing incessantly. A wave of light would appear in the northern horizon, and instantly rush to the zenith, producing curvature in the straight columns, which at once resumed their original position when the wave passed, only to be wrought again in a few seconds.

The whole northern hemisphere quaked with the rapidity of lightning without cessation during the hour following midnight, each upheaval impelling light-emitting matter to the zenith, where it was no longer agitated, but floated slowly south. Much of this actually descended as far as Scorpio  $30^{\circ}$  south declination, so that nearly the entire celestial vault was filled with the coruscations. This unparalleled display of auroral activity was still in motion at 4<sup>h</sup> 20<sup>m</sup> A. M., when the solar rays obscured the scene. The sun-spot turbulence, the aurora, and a magnetic storm, occurring all at one time, seem to indicate a bond of union between solar and terrestrial energy, the secret of which yet eludes research. The perpetual flashing of the heavens was the most marked feature of the aurora, giving rise to a scene of appalling grandeur and sublimity.

April 17th, 6<sup>h</sup> 35<sup>m</sup> P. M. A brilliant aurora australis was seen in New Zealand. It is remarkable that this was almost, if not quite, contemporaneous with the aurora borealis above described.

May 14th, 11<sup>h</sup> 15<sup>m</sup> P. M. This display was seen in England. A very bright streamer shot up from the horizon beneath Cassiopeia, covering without hiding that constellation. Numerous white, flickering streamers extended rapidly toward the northwest, overspreading the northern hemisphere from Cassiopeia to Gemini.

May 18th, from 12 to 1 o'clock, A. M. A bright aurora was seen in Scotland.

On August 4th, from 10<sup>h</sup> 30<sup>m</sup> to 11<sup>h</sup> P. M. A fine aurora was seen in Scotland.

October 2d. A very bright aurora was seen in England on the evening of October 2d. Shortly before seven o'clock a bright arch extended along the northern horizon to a height of  $20^{\circ}$ . From this arch "remarkable outbursts of streamers" shot up at intervals toward the zenith, the most active movements corresponding closely in point of time with the violent magnetic disturbances of the same evening.

November 18th. A grand auroral display was witnessed in New York and other North-



ern States on the morning of November 13th, Mr. Brooks, of Phelps, N. Y., describes it as the most brilliant he had seen in many years. Its light was estimated as equal to that of the moon at first quarter. Streamers and auroral waves arose from the northern horizon to the zenith. A feeble aurora was also seen on the following evening.

November 17th-20th. Another extraordinary aurora was seen very generally throughout the Northwestern States and Territories on the nights of November 17th and 19th. An observer at Wooster, Ohio, who witnessed the great aurora of 1859, describes that of November 17th as surpassing it in grandeur. In Minnesota, Nebraska, Wyoming, and Dakota, the display was extremely brilliant, the brightness being greater than that of the full moon. As seen in Indiana and the adjacent Northwestern States, that on the night of the 19th was scarcely less magnificent. Its greatest brightness was between the hours of 1 and 6 A. M. In some places the light was so great that persons arose, supposing it to be daylight. The aurora was preceded and attended by a violent magnetic storm both in Europe and America. Large sun-spots—one visible to the naked eye—were seen a day or two before the aurora.

TRANSIT OF VENUS.—At the last session of Congress, a committee was appointed to take charge of all matters connected with the observations of the transit of Venus on December 6, 1882. This committee consists of the Superintendent of the Naval Observatory, the President of the National Academy of Sciences, the Superintendent of the United States Coast and Geodetic Survey, the Superintendent of the Nautical Almanac, and two professors from the Naval Observatory. An appropriation of \$85,000 was also made to meet the expenses connected with the observations. Eight stations—four in the northern hemisphere and four in the southern—were selected for the observations. Each party of observers consists of four members—a chief astronomer, a photographer, and an assistant to each. The stations and astronomers-in-chief are as follows:

STATIONS.		Chief Astronomers.
Washington, D. C.	Prof. William Harkness, U. S. N.	
Fort Thorn, N. M.	Prof. Geo. Davidson, U. S. C. & G. S.	
Cedar Keys, Fla.	Prof. J. R. Eastman, U. S. N.	
San Antonio, Texas	Prof. Asaph Hall, U. S. N.	
Santiago de Chile.	Prof. Lewis Boss.	
New Zealand.	Mr. Edwin Smith, U. S. C. & G. S.	
Santa Cruz, Patagonia.	Lieut. S. W. Very, U. S. N.	
Cape of Good Hope.	Prof. S. Newcomb, U. S. N.	

At the station last named, the sun will set with Venus on his disk, and at New Zealand, ingress will have taken place before sunrise.\*

The Executive Committee of the Royal Society of London, acting under the authority of the Treasury, have selected thirteen stations for the observation of the transit, and the governments of Continental Europe have made similar arrangements.

#### NEW DETERMINATION OF THE EARTH'S MEAN

\* This article was written before the date of the transit.

DENSITY.—A new and ingenious method of finding the earth's density has been devised and applied by Professor von Jolly, of Munich. On the top of a tower, seventy-three feet high, was placed a pair of scales. To each plate of the instrument a wire was attached which, passing through a zinc tube, reached within less than four feet of the earth. To the lower end of each wire another plate was attached, and under one of these was placed a globe of lead one metre in diameter. Bodies placed first in the upper scales, and then in the lower, had a measurably greater weight in the latter. Again, bodies weighed more or less in the lower scale, according as the leaden globe was present or absent. The differences of these weights furnished data for determining the ratio of the earth's density to that of lead. Mr. von Jolly's experiment gave a mean density of 5.692, the density of water being unity. This slightly exceeds the value obtained by Mr. Bailey.

MINOR PLANETS.—The following asteroids were discovered in 1882:

No.	Discoverer.	Where discovered.	Date.	Discoverer's No.
221	Palisa	Vienna	January 19	80
222	Palisa	Vienna	February 9	81
223	Palisa	Vienna	March 9	82
224	Palisa	Vienna	March 30	83
225	Palisa	Vienna	April 19	84
226	Palisa	Vienna	July 19	85
227	Paul Henry.	Paris	August 12	7
228	Palisa	Vienna	August 19	86
229	Palisa	Vienna	August 22	87
230	Dr. de Ball.	Bothkamp.	September 3	1
231	Palisa	Vienna	September 10	88

It is thus seen that of the eleven minor planets, discovered since January 1, 1882, the indefatigable Palisa has detected nine.

The elements of these new members of the group, so far as determined, are as follows:

No.	Mean Dist.	Period.	Eccen.	Incl.	Long. Asc. N.	Long. Per.
		Days.	° ' "			
221	3.0015	1899.4	0.1415	11 45 18	142 47 53	830 54 17
222	3.1942	2085.2	0.1715	2 6 54	78 10 15	286 46 50
223	3.1000	1998.3	0.1408	1 57 17	50 20 56	101 14 4
224	2.6432	1568.7	0.0350	5 55 52	353 30 40	273 36 20
225	3.3550	2247.5	0.2485	20 55 2	200 35 18	302 44 5
226	2.7477	1663.6	0.2214	15 48 31	185 19 40	281 32 45
227	3.1755	2069.9	0.2482	9 39 18	380 42 11	223 42 27
228	2.2030	1195.0	0.2565	2 32 49	313 15 19	380 32 57
229	3.3914	2251.2	0.1552	2 12 4	30 81 44	320 19 19
230	2.8330	1344.3	0.0539	9 28 23	239 30 12	248 58 26
231	2.9260	1830.4	0.1730	5 23 5	332 53 45	248 49 54

It is seen from this table—1. That the orbit of No. 224 is nearly circular; 2. That those of Nos. 225, 226, 227, and 228, are very eccentric; and, 3. That the perihelion distance of the last (228) is about equal to the aphelion distance of Mars.

The following minor planets have been recently named:

No. 205. Martha.	No. 214. Aschera.
" 207. Hiedda.	" 215. Enona.
" 208. Lachrimosa.	" 216. Cleopatra.
" 210. Isabella.	" 217. Endora.
" 211. Isolda.	" 218. Bianca.
" 212. Medea.	" 219. Thusnelda.
" 213. Lilaea.	

**OBSERVATIONS OF MINOR PLANETS FOR THE DETERMINATION OF THE SOLAR PARALLAX.**—A method of determining the solar parallax from observations of the interior asteroids when in opposition was proposed by Dr. Galle some years since. A series of observations to be employed for this purpose was recently arranged by Dr. Gill, the Astronomer Royal for the Cape of Good Hope. The minor planets Sappho and Victoria were favorably situated for such observations at their oppositions in 1882. In the northern hemisphere the necessary observations were made at Clinton, N. Y., Dublin, Strasburg, Berlin, Bothkamp, Leipsic, Upsala, and Moscow; and in the southern hemisphere at Melbourne, Rio de Janeiro, the Cape of Good Hope, and Natal. The number of stations south of the equator is less than in the north, but from the clearer skies of the southern hemisphere an equal number of available observations was looked for as probable. The value of the sun's horizontal parallax resulting from the observations will doubtless be made known at an early day.

Dr. Gill, it will be remembered, had previously deduced a value of the solar parallax from heliometer observations of Mars in opposition.

**OBSERVATIONS OF PROFESSOR HOUGH.**—The annual report of Professor G. W. Hough, Director of the Dearborn Observatory, at Chicago, was issued in June, 1882. The planet Jupiter has been an object of special study during the past year, as it had been, in fact, since 1879. Recent observations, it is claimed, enable us to decide definitely in regard to the motion of certain points on the disk, though the physical condition of the planet is still somewhat uncertain. The most important conclusions reached by Dr. Hough are: that the changes taking place on the planet are very slow in their operations; that the observed phenomena on the disk are probably periodical, as has been found to be the case on the sun's surface; that some of the marks or objects noticed are much more permanent in their positions than others; that at least the superficial parts of the planet are in a liquid or plastic condition; that the great red spot is not fixed as a solid portion of the planet's crust, but, on the contrary, is slowly retrograding; that the mean period of rotation between September '25, 1879, and March 29, 1882, was  $9^{\text{h}} 55^{\text{m}} 35^{\text{s}}.9^{\text{s}}$ ; that the apparent rotation period has increased about four seconds since the opposition of 1879, indicating a total drift of the red spot in longitude of 40,000 miles; and that this interesting object may be regarded as "an immense floating island 29,600 miles in length, by 8,300 miles in breadth, which has maintained its shape and size, without material change, during more than three years."

Several small elliptical white spots have been also carefully watched. Two in particu-

lar, a little south of the great red spot, were systematically observed from November 21, 1881, to February 23, 1882. The following spot of this pair was apparently at rest relatively to the red spot from November 22d to December 6th. About the latter date it commenced drifting in the direction of rotation; the total drift in seventy-nine days amounting to  $41^{\circ}$ . During the last sixty days the average motion relatively to the planet's surface was fifteen miles per hour.

The two white spots did not retain the same relative positions in longitude with respect to each other. The observations also indicate that the whole surface of Jupiter outside the equatorial belt rotates with nearly the same angular velocity. Also that these spots are not fixed, but may have a slow direct or retrograde motion. Professor Hough remarks that the observations of these spots may have an important bearing on the theory of the planet's physical condition, as well as on that of the rotation of its different parts.

There are also two principal white spots in the great equatorial belt, differing in longitude about  $15^{\circ}$ , and in latitude about  $1''$ . The rotation period for these spots has been found to be  $9^{\text{h}} 50^{\text{m}} 9^{\text{s}}.8^{\text{s}}$  or  $5^{\text{m}} 28^{\text{s}}$  less than that of the great red spot. In other words, the equatorial spots drift in the direction of Jupiter's rotation at the rate of 260 miles per hour; making a complete revolution on the planet's surface in about forty-five days. Professor Hough adds that "from observations on other small white spots, as well as on dark markings near the equator, it is probable that the matter in the equatorial regions constantly drifts in the direction of the planet's rotation; and it seems probable that the rate of this drift depends on the latitude." From all the observations we may infer that no exact period can be assigned as that of Jupiter's rotation, and that, in fact, the period varies with the latitude.

Mr. S. W. Burnham, who had been absent some months at the Washburn Observatory, Wisconsin, has returned to Chicago, and resumed his observations on double stars with the great refractor of the Dearborn Observatory. He is preparing for publication a catalogue of 151 double stars, discovered by himself during the past three years, and also a collection of all his star observations during the same period.

Professor Hough's report has an engraving of the Chicago University, showing the tower of the Dearborn Observatory, one of the 18½-inch equatorial, and twelve colored drawings showing the appearance of Jupiter's disk at different times, giving the forms, positions, and colors of the belts and spots. A comparison of these drawings shows very clearly the relative drift of the spots on the planet's surface.

**COMETS.**—The first comet of 1882 was discovered by Mr. Charles S. Wells, at the Dudley Observatory, Albany, N. Y., on the night of



March 17th. Its elements, according to Dr. H. Oppenheim, are as follows:

Perihelion passage .....	1882, June 10, Berlin M. T.	
Longitude of perihelion.....	53° 55' 25''	} Mean equinox, 1882-0.....
Longitude of ascending node.....	204° 54' 54"	
Inclination.....	73° 47' 25"	
Perihelion distance .....	6,600,000 miles.	
Motion.....	Direct.	

These elements have no decided resemblance to those of any other known comet. Spectroscopic examinations by Drs. Vogle, Huggins, Lohse, and others, gave evidence of a peculiar chemical constitution. In the "Astronomische Nachrichten," No. 2,434, Dr. Vogle remarks that "since 1864, when Huggins first analyzed the light of a comet, about twelve comets have been spectroscopically examined. The spectra of all these showed, in addition to a more or less distinct continuous spectrum, three separate streaks diffused on one side, and situated correspondingly to those in the spectra of the compounds of carbon. The completely different constitution of the present comet, the proper light of which appears principally to proceed from incandescent vapor of sodium, places it among the most interesting subjects of observation in the new department of spectrum analysis that have yet been examined." This result, however, need not seem surprising, since the spectroscopic analysis of the meteors of different streams has indicated a difference in their chemical composition.

The second comet of 1882 was observed very near the sun during the total solar eclipse of May 17th. It was seen by Messrs. Lockyer, Tacchini, Thollon, Trépiéd, and possibly others. Its brightness appeared to M. Trépiéd of the same order as that of the exterior parts of the corona. For several days after the eclipse this observer continued his search for the comet, both after sunset and before sunrise, but without success. If periodic, however, the fact may be determined by future observations, and the comet identified by tracing back its movement to the position when seen in 1882. Three photographs of the corona were taken during the totality of the eclipse. The comet is found in each of these pictures, and an exact comparison shows its distance from the sun to have been increasing. In other words, the comet had passed its perihelion.

The third comet of 1882 was discovered at Cordoba, South America, by Dr. B. A. Gould, on the night of September 6th. It was detected independently by Mr. Finlay, of the Royal Observatory, at the Cape of Good Hope, on the morning of the 8th, and four days later by Dr. Cruls, of Rio de Janeiro. In the northern hemisphere it was first seen at Reus, Spain, by M. Jaime Pedro y Ferrier, on Sunday, Sep-

tember 17th, at ten o'clock A. M. It was seen, very generally, close to the sun, by the astonished inhabitants of the village; and so great was its brilliancy that its motion could be observed through thin passing clouds. On examining it by the aid of an opera-glass with colored lenses, the tail was distinctly visible. The distance of the nucleus from the sun when first noticed was about  $1^{\circ} 30'$ . In England it was first seen by Mr. Ainslie Common, at Ealing, at  $10^{\text{h}} 45^{\text{m}}$ . Mr. Common happened to be observing the sun, when to his surprise he found a bright comet close to its margin, and apparently approaching it with great rapidity. On Monday, September 18th, it was seen in bright sunlight by many observers both in Europe and America. In the clear mountain air of Colorado and Arizona it could be followed without a telescope for several days after its discovery. Its nearest approach to the sun occurred on Sunday, September 17th, when its distance from the surface, according to Dr. Hind, was only 300,000 miles. This was the distance of its nucleus or center of gravity, and, as its envelope or coma was of considerable extent, the latter doubtless grazed the solar atmosphere. The comet's velocity in perihelion was 370 miles per second, or nearly twenty times that of the earth in its orbit. Consider-



THE COMET AS SEEN BY THE EYE AT NEW YORK.

able perturbation of the comet's motion during its perihelion passage would therefore be highly probable, and accordingly such disturbance was indicated by observation. In "Nature," for October 12th, it is said that—

At the moment when Mr. Gill observed the comet upon the sun's limb, when the distance from the sun's center was consequently  $16^{\circ} 0'$ , the orbit gives the central distance as  $10^{\circ} 9'$ , or the comet projected upon the sun's disk. Considering that Mr. Gill's observation was made less than one day previous to the accordant meridian observations at Dun Echt and Coimbra, it is not easy to see how such difference could arise from error of elements, which represent the middle position employed in their determination within a minute of arc.

Mr. Gill, in his account of the observations of September 17th, makes the interesting remark that the comet was followed by two observers with different telescopes entirely to the

sun's limb, where it suddenly disappeared at  $4^{\circ} 50'' 58''$ , Cape mean time.

Elements of the comet were computed by Professor S. C. Chandler, of Cambridge, Mass.; Dr. Hind, of London, Eng.; Mr. Corrigan, of Washington, D. C.; Professor H. A. Howe, of Denver, Col., and many others. A striking resemblance between these elements and those of the comets of 1668, 1843, and 1880, was at once noticed, suggesting the identity of the four bodies. This hypothesis was provisionally accepted by several astronomers, who accounted for the rapid shortening of the period by the comet's motion in perihelion through the corona, or the outermost strata of the solar atmosphere. Should this theory be verified, the comet's career must evidently soon terminate in a collision with the sun.

The resemblance of the elements of the comets of 1668 and 1882 is seen by the following comparison:

ELEMENTS.	Comet of 1668.	Comet of 1880.
Perihelion passage .....	1668, Feb. 28-8	1882, Sept. 17-00
Longitude of perihelion .....	$277^{\circ} 2' 0''$	$276^{\circ} 10' 45''$
Longitude of ascending node .....	$357^{\circ} 17' 0''$	$346^{\circ} 16' 00''$
Inclination .....	$35^{\circ} 58' 0''$	$87^{\circ} 54' 03''$
Perihelion distance .....	0.0047	0.0081
Motion .....	Retrograde ..	Retrograde.
Computer .....	Henderson..	Corrigan.

The similarity of elements is no less striking in the case of the comets of 1843 and 1880. Mr. Chandler, however, assigns to the comet of 1882 a period of over eight years, or more than three times the interval between the apparitions of 1880 and 1882—a fact unfavorable to the theory of identity. On the other hand, the "Astronomische Nachrichten," No. 2,430, has some new researches on the orbit of the great comet of 1880, by Dr. M. W. Meyer, of Geneva, Switzerland—researches which have an important bearing upon this question of orbital convergence. Dr. Meyer finds the period of Gould's comet (1880 I.) to be somewhat less than thirty-seven years, or equal to the interval between its own perihelion passage and that of the great comet of 1843. Dr. Meyer accordingly regards the two apparitions as returns of the same body. Professor Hubbard assigned the comet of 1843 a period of more than five hundred years. It becomes, therefore, Dr. Meyer remarks, a matter of much importance that the observations of the comet of 1843 be rediscussed, to determine whether they can be reconciled with the short period of thirty-seven years. If not, he concludes that the acceleration of the comet's motion may have been due to its passage through the sun's atmosphere.

The spectroscopic examination of Gould's comet exhibited both the sodium and the carbon lines. "The spectrum of the nucleus," says Professor Young, "consisted of a fairly bright continuous spectrum, overlaid by the usual carbon bands, and one or two lines. The D-line was distinctly seen, and seen double, but was faint and hard to catch. The fourth carbon band in the violet was also faint. The

brightest carbon band (near  $\delta$ ) was very bright and beautifully defined, showing clearly the three bright lines in it, which were seen in the great comet of 1881. A direct comparison with the blue base of the flame of a small wax-candle showed a perfect coincidence between its bands and those of the comet. No dark lines were visible in the comet spectrum. The cometary bands were easily seen all through the head of the comet, and, by opening the slit, could be traced a long distance into the tail."

The observations of several astronomers seemed to indicate that parts of this comet had become, or were becoming, detached from the nucleus. Dr. Julius Schmidt, Director of the Observatory of Athens, Greece, announced the discovery, on October 8th, of a telescopic comet only four degrees southwest of the great comet, and moving in the same direction. In the "Sidereal Messenger" for November, Mr. William R. Brooks, of Phelps, N. Y., states that while sweeping in the region of the great comet, on the morning of October 21st, he discovered a cometary mass eight degrees east of Gould's comet. Its length was about two degrees. On the 15th of October, Professor Young, of Princeton, noticed a nebulous stripe, about half a degree wide, extending from the nucleus toward the sun a distance of four degrees.

The greatest apparent length of the tail of Gould's comet was from  $15^{\circ}$  to  $18^{\circ}$ , and its true length probably about 50,000,000 miles.

In the "Science Observer" for November 15, 1882, Mr. Chandler gives elements derived from all available observations from September 18th to October 20th. The period indicated is much longer than that which he had previously calculated. The theory, therefore, that the great comet of 1882 is identical with that of 1880 has been generally abandoned.

Mr. E. E. Barnard, of Nashville, Tenn., discovered another comet on September 10th. It was circular, with some central condensation, and its light was equal to that of a star of the tenth magnitude. From the observations obtained from September 14th to October 7th, Mr. Hind, of England, calculated the following elements:

Perihelion passage, November ....	13-0067, G. M. T.
Longitude of perihelion .....	$354^{\circ} 47' 6''$
Longitude of ascending node .....	$249^{\circ} 8' 9''$
Inclination .....	$83^{\circ} 43' 1''$
Perihelion distance .....	88,000,000 miles.
Motion .....	Retrograde.

These elements have no decided resemblance to those of any other known comet.

EXPECTED RETURN OF THE COMET OF 1812.—The period assigned this comet by Bessel was 70.68 years; its return was therefore expected in 1882 or 1883. Recently, however, Professors Schulhof and Bossert have rediscussed the observations of 1812, including a series by Banplain at Marseilles, which they discovered in the original, and which were not used by Bessel. The resulting period is 73.18 years, and the most probable time of the next return, September, 1884.



# DISCOVERY AND ANNOUNCEMENT OF COMETS.

—In a statement of work done at the Harvard College Observatory during the years 1877-1882, by the director, Professor Edward C. Pickering, the following account is given of the methods adopted in the systematic search for comets, the announcement of discoveries, and the early determination of cometary orbits:

By securing the services of Mr. Chandler as an assistant, and by the co-operation of Mr. Ritchie of the "Science Observer," a scheme has been developed which has made great advance in the early announcement of comets. When a comet is discovered, notification is usually sent to this observatory by telegraph. If the discovery was made in this country, a telegram is at once sent to the Dun Echt Observatory, and thence distributed throughout Europe. The following evening, if clear, an observation of the comet is taken, and the resulting position telegraphed to Europe. These early positions have in some cases proved of great value, and have been used again and again in each subsequent orbit. Great care has been taken to avoid all delay in sending them, with the result that occasionally these precise positions have become known abroad before the discovery itself had been announced by the usual method. As soon as these observations are obtained, the computation of the orbit is begun, and the work continued at all hours of the day or night until the results have been translated into the "Science Observer" cipher and cabled. About four days after the comet is discovered its elements and ephemeris are generally printed and distributed in this country and in Europe. By an arrangement with the Signal Service and with other observatories, when cloudy weather is expected here, observations are sometimes obtained elsewhere to avoid delay. Such arrangements have been made with the daily papers and with the Associated Press, that any important observation made here before midnight would probably be printed in the papers of the following morning in the principal cities of the country.

By the same system of co-operation a plan for sweeping for comets has been developed, in accordance with which a number of observers have undertaken to examine a certain portion of the heavens once or twice every month, and satisfy themselves that no comet within the reach of their telescope is to be found there. The results published in the "Science Observer" show that the entire heavens is now so thoroughly swept that a comet is not likely to be long visible without detection.

The observers engaged in this systematic search in the northern hemisphere are Mr. T. S. H. Shearman, of Brantford, Canada; Mr. E. S. Martin, Wilmington, N. C.; Mr. A. S. Williams, West Brighton, England; M. O. Detaille, Paris, France; Dr. H. Oppenheim, Berlin; Dr. Lewis Swift, Rochester, N. Y.; Mr. E. E. Barnard, Nashville, Tenn.; Professor E. L. Larkin, New Windsor, Ill., and Mr. W. R. Brooks, Phelps, N. Y. In the southern hemisphere, Mr. John Tebbutt, of Windsor, N. S. Wales, takes the zone between the 20th and 40th parallels of latitude; Mr. A. B. Biggs, of Launceston, Tasmania, from the 40th to the 60th; and Mr. W. Bone, of Castlemaine, Victoria, from the 60th to the 80th.

METEORIC SHOWERS.—The meteors of April 20th were more numerous than usual in 1882. Mr. H. Corder, of England, watching from 9<sup>h</sup> 30<sup>m</sup>. to 12<sup>h</sup> 30<sup>m</sup>., counted thirty-four me-

teors, of which twenty-six were conformable to the radiant in Lyra. Mr. Corder, who has given attention to the meteors of this stream for the last six years, found the hourly number twice as great in 1882 as in any other year since 1876. Four of the meteors were equal to stars of the first magnitude. The radiant point was near Theta Lyrae, in right ascension 268°, and north declination 37°.

The meteors of the August shower were much more numerous in some localities than in others. In "Nature," for September 28th, Mr. Donald Cameron, of Glasgow, Scotland, gives the result of his observations from the 6th to the 11th of August inclusive. The showers witnessed on the nights of the 9th, 10th, and 11th, are described as "gorgeous." On the evening of the 10th, before the close of twilight, he counted thirteen very large meteors in the space of a few minutes, although his view was much intercepted by trees and buildings. Mr. Cameron does not give the whole number observed, but he remarks that he had not for years during any month witnessed so grand a display of meteors as in August, 1882. The shower "was of very short duration on each night, and after twelve o'clock not one scarcely could be seen."

According to the "Sidereal Messenger," for October, 1882, watch was kept for the August meteors at several points in Indiana on the nights of the 8th, 9th, 10th, and 11th. At Bloomington, on the night of the 10th, a party of four, under the direction of Professor D. E. Hunter, counted 521 meteors in four hours, commencing at 10<sup>h</sup> 30<sup>m</sup>. This was an average of 130 per hour. Of these, 139 were estimated as of the first magnitude, 99 of the second, and 76 of the third. A stationary meteor was seen at 1<sup>h</sup> 34<sup>m</sup>., which increased from the fourth to the first magnitude. This, of course, was at the point of divergence, and moving directly toward the observers. A bluish Perseid of the first magnitude appeared in Draco at 1<sup>h</sup> 33<sup>1</sup>/<sub>2</sub><sup>m</sup>., and moved in a track apparently curved. In a second or two this was succeeded by another, of nearly the same size and color, which moved in precisely the same path. The meteors frequently came in clusters, five or six sometimes appearing in quick succession. At other times a lull or total cessation would last several minutes.

In one hour—from eight to nine—on the evening of the 10th, Mr. W. F. L. Sanders, watching alone at Jasper, Dubois County, observed forty meteors.

At Bloomfield, Greene County, Ind., Dr. H. R. Lowder and others kept a continuous watch on four nights, commencing at nine o'clock on the evening of the 8th. The observers counted—

On the night of the 8th.....	761 meteors.
" " " 9th.....	1,527 "
" " " 10th.....	3,677 "
" " " 11th.....	667 "
Total in four nights.....	6,632 "

At Cambridgeport, Mass., where watch was kept by Mr. E. F. Sawyer, the number of meteors observed was not extraordinary. The night of the 10th, however, was quite overcast, and those of the 9th and 11th were more or less cloudy.

**METEORS OF OCTOBER 20th.**—At Washington, Ind., on the morning of October 20th, thirty meteors were counted by Professor D. E. Hunter, from 4<sup>h</sup> to 4<sup>h</sup> 30<sup>m</sup>. Twenty-three of this number had their radiant in Gemini.

**METEORS OF NOVEMBER 14th.**—On the morning of November 14th, Mr. D. E. Hunter, Principal of the Washington High-School, Washington, Ind., watched for meteors from 3<sup>h</sup> 10<sup>m</sup> to 5<sup>h</sup> 11<sup>m</sup>. The number seen in successive half-hours was as follows:

	Leonids.	Sporadic.	Total.
From 8h. 10m. to 3h. 40m. ....	14	15	30
" 3 40 " 4 10 .....	16	9	25
" 4 10 " 4 40 .....	4	4	8
" 4 40 " 5 11 .....	14	7	21
Meteors in two hours. ....	48	36	84

During the first hour Mr. Hunter had four assistants, and during the second three. The visible paths of the Leonids were unusually short—thirty not exceeding 10° in length. The morning of the 15th was cloudy.

**LARGE METEORS.**—Meteoric fire-balls were observed during 1882 at the following dates:

March 9th, at 11<sup>h</sup> P. M. This meteor was seen by a party of five gentlemen about eight miles northeast of Warsaw, Kosciusko County, Ind. The sky was entirely covered with clouds, and snow was rapidly falling. Consequently the meteor could not be seen till it had passed below the clouds. The report of its explosion was distinctly heard at Warsaw, the county-seat, and excited much attention, from the fact of its occurring during a heavy snow-storm.—(*Observatory*, July, 1882.)

March 12th, 8<sup>h</sup> P. M. A large, violet-colored meteor was seen near Haren, Netherlands, in the southwest.

March 18th, 1<sup>h</sup> A. M. A large, detonating meteor was seen near Groningen. On the same night, and at the same hour, another fire-ball was observed near the village of Bergen, in North Holland.—(*Nature*, July, 1882.)

March 12th, 9<sup>h</sup> 25<sup>m</sup>, P. M. A very brilliant fire-ball was seen at Cambridge, Mass. It appeared near the zenith, and vanished at an altitude of 65°, its course being from southeast to northwest. It consisted of two nuclei, one following the other.—(*Science Observer*, July, 1882.)

May 4th, 9<sup>h</sup> 31<sup>m</sup> P. M. A meteor "as brilliant as the full moon" was seen at Stonyhurst Observatory, and at other points in England. It appeared near Arcturus, and moved through Ursa Major, passing between the stars Delta and Epsilon. It was visible five seconds.—(*Nature*, June 8th.)

May 16th, 11<sup>h</sup> A. M. A large meteor was

seen at the University of Oxford, England. It appeared 5° above the main cluster of *Coma*, passed a little above Iota, in the Great Bear, and vanished 5° to the left of Beta Aurigæ; time of flight between eight and ten seconds. A few minutes later another was seen, describing very nearly the same path.—(*Nature*, May 25.)

June 24th, 9<sup>h</sup> 33<sup>m</sup>. A magnificent meteor was observed by many persons at Wilmington and other points in North Carolina. It exploded with a loud detonation over Lenoir County.

September 3d, at 9<sup>h</sup> 10<sup>m</sup> P. M. A large meteor was seen by H. Corder, of Great Baddow, England. It appeared "just below Lacerta, and, passing Polaris, disappeared with a flash near the tail of Draco."

September 10th. At 8<sup>h</sup> 25<sup>m</sup> P. M., Messrs. O. and E. Corder saw from the cliff of Lowestoft, England, a meteor which seemed to start in the east from a point about 20° above the horizon and move to the zenith, where it exploded. The head was pear-shaped and nearly as large as the moon.

**VARIABLE STARS.**—In the "Science Observer," No. 35, December 15, 1881, Mr. Edwin F. Sawyer, of Boston, announced the discovery of a new variable. Its position for 1882.0 is right ascension 17<sup>h</sup> 10<sup>m</sup> 33<sup>s</sup> declination 1° 20' 36" north. The character of its variations assigned it to the small but very interesting class of short period variables of which Algol is the type; the period, according to Mr. Sawyer's observations, being about five days and six hours. The same journal for July 12, 1882, contains the result of late observations of the same star by Mr. S. C. Chandler, of the Cambridge (Mass.) Observatory. Mr. Chandler has demonstrated that the period is but 20<sup>h</sup> 7<sup>m</sup> 42<sup>s</sup> instead of 5.24 days, and that all the variations take place in one fifth of this time, or in about four hours. "In several respects, Mr. Sawyer's star ranks as the most remarkable in the list of known variables. Its period is the shortest of any, and very much shorter than any of the peculiar class to which it belongs, known as the Algol type. Not only this, but the portion of its period to which the variations are confined is also far the shortest of any."

The "Observatory," for March, 1882, contains a second paper by Mr. T. E. Espin on the distribution of the variable stars. In his former paper on this subject it was shown that the variables are confined for the most part to a well-marked zone inclined 15° or 20° to the equator. His later discussions furnish some remarkable conclusions in regard to the periods of variation. Thus "if we tabulate the number of stars in each ten days up to periods of 440 days, we find—

"1. There are no stars with periods between 71 and 135 days.

"2. No such gap occurs elsewhere, nor is there any sign of such.



"3. The number of stars decreases rapidly on one side of the gap, and increases on the other side of the gap."

Calling the stars with periods less than 71 days Class I, and those on the other side of the gap (that is to say, with periods greater than 135 days) Class II, Mr. Espin has found, from a careful consideration of the phenomena of the variable stars in Class I, that when the variation is small, or when the variable at its maximum is bright, the period is generally short. These facts, he remarks, may be of service in observing stars suspected of variation.

**NEW PLANETARY NEBULÆ.**—The "Observatory," for October and November, gives the positions of twelve small planetary nebulæ recently discovered by Professor Pickering. It is a remarkable fact in regard to these objects that they are all found in or near the Milky Way.

**OBSERVATORIES.**—**WASHBURN OBSERVATORY OF THE UNIVERSITY OF WISCONSIN.**—The first volume of the publications of this observatory was issued in October, 1882, by the director, Professor Edward S. Holden. It contains a description of the observatory buildings and instruments; a catalogue of 195 stars, reduced by Mr. G. C. Comstock, assistant in the Washburn Observatory; reduction tables for the latitude of Madison; a list of 27 new nebulæ discovered in the zone observations at the Washburn Observatory, from April 23 to September 30, 1881; a list of 60 new double stars discovered in the zone observations by Professor Holden; a list of 88 new double stars discovered by Mr. S. W. Burnham; measures by Mr. Burnham of 152 selected double stars; observations of 84 red stars, and a list of 27 new red stars; and observations and drawings of the great comet of 1881.

**THE LEANDER MCCORMICK OBSERVATORY OF THE UNIVERSITY OF VIRGINIA.**—Professor Ormond Stone, late of Cincinnati, having been appointed director of this observatory, commenced the duties of his new position in the summer of 1882. The great refracting telescope, made by Messrs. Alvan Clark and Sons, of Cambridge, Mass., for Mr. McCormick a few years since, has been presented by that gentleman to the University of Virginia. This instrument, which cost \$50,000, is not surpassed in this country, and is equaled only by the 26-inch refractor of the Naval Observatory at Washington. It is understood also that the chair of Astronomy has been liberally endowed by the friends of the university. From the great power of the instrument, its favorable position, and the recognized ability of Professor Stone, astronomers may anticipate important results.

**THE PRINCETON TELESCOPE.**—This instrument, now mounted and ready for use, ranks as the second in magnitude of the great refracting telescopes in the United States. Its object-glass is twenty-three inches in diameter

—only three inches less than that of the great equatorial of the Naval Observatory at Washington. This glass is peculiar in its form, consisting of two lenses separated by an interval of about seven inches. The free circulation of air through this vacant space will diminish the disturbance resulting from a change of temperature. The instrument, which is provided with all necessary appliances, will be chiefly used by Professor Young, the distinguished director, in the department of stellar spectroscopy. The spectroscope, the most powerful of its kind ever constructed, was made by Hilger, of London, under the supervision of the Astronomer Royal. The whole cost of the equatorial and spectroscope was \$26,000.

In the summer of 1882 the Yale College Observatory received its new heliometer, regarded as the most perfect micrometric apparatus in either Europe or America. This instrument, as well as the equatorial recently purchased, was expected to be in readiness for observing the transit of Venus on December 6th. The Lick Observatory, on Mount Hamilton, California, has received a sidereal clock from Hohwu, of Amsterdam, and the observatory buildings are in the process of erection. The Warner Observatory, Rochester, N. Y., was completed in 1882. Its new telescope, a sixteen-inch refractor, has been received and mounted. In the hands of Dr. Swift, the director, it may be expected to perform good service.

**NEW ASTRONOMICAL JOURNALS.**—Professor William W. Payne, director of the observatory at Northfield, Minn., has commenced the publication of a new astronomical periodical entitled "The Sidereal Messenger." The journal is issued monthly, except for July and August. It is popular rather than technical, giving the results of observation and research both in Europe and America.

M. Flammarion, of Paris, well known for his numerous works on popular astronomy, commenced the publication of a new journal under the title of "L'Astronomie," in March, 1882. It is a monthly review of astronomy, meteorology, and physiography, each number containing forty pages, large quarto, with numerous woodcuts. The first number contains an interesting account of the Paris Observatory.

**ASTRONOMICAL PRIZES.**—The gold medal of the Royal Astronomical Society of London was awarded in February, 1882, to Dr. David Gill, Astronomer Royal at the Cape of Good Hope, for his heliometric observations of Mars at ascension, and for his discussion of the results. The president, J. R. Hind, Esq., laid before the society the ground on which this award had been founded. The Lalande prize of the French Academy of Sciences was awarded to Dr. Lewis Swift, Director of the Warner Observatory, Rochester, N. Y., for his discovery of seven comets in four years, one of

them belonging to the group of periodic comets having their aphelia in the vicinity of Jupiter's orbit. The prize offered by H. H. Warner, Esq., of Rochester, N. Y., for the best essay on comets, their composition, purpose, and effect upon the earth, was awarded to Professor Lewis Boss, Director of the Dudley Observatory, Albany, N. Y.

**AUSTRALIA AND POLYNESIA.** The Australasian colonies resemble each other greatly in their public policy and their economic conditions, which are not seriously affected by the rivalry between high and low tariff carried on by the two leading colonies. Their policies differ only in degree, and have a prospect of becoming assimilated. The proposal of an Australian Federation has been revived in the Victorian Legislature. In spite of the boundless prosperity of Australia and the high rates of wages now prevailing, the bone and sinew of British immigration is drawn toward the more liberal institutions of the United States, while farmers with large capital are naturally attracted by the splendid opportunities of these colonies.

**REVENUES.**—The financial budgets of all the colonies for 1882 show revenues greatly exceeding the estimates. The revenue of New South Wales for the year ending June 30th was £7,213,000, an increase of a million over that of the previous year. That of Victoria was £5,750,000, being £316,000 above the estimate. The revenue of South Australia was £2,225,000, an increase of £175,000. That of Queensland was £2,100,000, showing an increase of £331,000, and leaving a surplus of £245,000. The redundant revenues which place these progressive young commonwealths in a financial position altogether exceptional are due to the supplementary income from sales of public lands. Yet the present augmentations in the public income are not attributable to forcing the land-sales, but to the increased consumption of articles paying custom and excise duties, and to increased traffic on the Government railroads. Severe droughts affected nearly the whole surface of the Australian Continent in the beginning of the year. The wool-crop in consequence showed very little, if any, increase over the preceding year. But, notwithstanding the losses from this cause, and the partial failure of the wheat-crop in South Australia in 1881, the general tide of prosperity has continued to rise. When the surface of Western Australia, which is rapidly filling with squatters, is as completely occupied as the Eastern colonies now are, the limit will be reached of Australian wool production under present conditions and at present prices. New South Wales and New Zealand have added to their large public debts by contracting new loans, which they have obtained on favorable terms in London. The agreement of the colonies to exercise common federal action can not be consummated while Victoria and New South Wales maintain their rival commercial

policies. But the abandonment of the restrictive tariff of Victoria seems only a matter of time, since a respectable number of the manufacturers have joined with the merchants and farmers in condemning the tariff. The protective policy vehemently championed by Graham Berry, the former Prime Minister, and leader of the Democratic party, still finds strong support among the laboring classes. The primacy among the colonies would be regained by New South Wales without the advantage of freer commercial intercourse with other countries, because that colony possesses a vast area of agricultural land, a central geographical position, and coal and the useful metals as well as gold.

**RAILROADS.**—The progress of Australia depends upon the extension of railroad communications, so that politics and finance center in the railroad policy of the colonies. In constructing state lines with capital mostly raised by public loans, the colonies do not have to look to remote returns in the increase of the taxable capacity of the country. The railroads thus far constructed pay a fair interest on the investment, and add greatly to the assets of the Government by rendering the public lands immediately valuable. The eighteen millions thus invested in Victoria yield  $4\frac{1}{2}$  per cent net per annum. That province has authorized the construction of 850 miles more. New South Wales has built over a thousand miles of railroads, and receives from them an income of 4 per cent on the expenditure. Queensland and South Australia have each laid out about 700 miles of railroads and several thousand miles of telegraphs. The railroad debts of the colonies are lightly borne; the railroads themselves usually yield the interest. New South Wales pays the interest of £766,000 on the public debt with the eighth part of its revenue. This colony has authorized £15,500,000 of new loans since 1879, which nearly double its debt. The Earl of Denbigh's projected railroad through fertile, well-watered, and rich mineral regions in the interior of Queensland to connect Sydney with Brisbane, was opposed by the Governor, who objects to signing away the valuable land-grants demanded, and is still in abeyance. South Australia is more favorably disposed to land subventions, and has entertained the project of a company to construct a line 1,900 miles long, following the line of the Government telegraph put up in 1881, directly across the continent from Adelaide to Port Darwin. It is a question whether this bold project shall not be carried out by the Government instead of the company. It has 400 miles of the proposed line, from Adelaide to the new town of Farina in the 30th degree of latitude, already built. The railroads which are now being constructed by New South Wales westward to the Darling River, southward to meet the railroads of Victoria, and northward in the direction of Brisbane, and the road which South Australia is pushing



toward Melbourne, promise to soon bring the four capitals of the leading provinces into direct railroad communication with each other.

**PUBLIC LANDS.**—The Australian colonies have pursued a policy with regard to the public domain widely divergent from that of the United States. While keeping the land out of the hands of speculators almost as effectually, their system has encouraged instead of preventing extensive agriculture and the formation of large estates. The agriculture of the country might have been more varied under the American homestead system, instead of being confined to stock-raising, and the ultimate social results might be better; but such a rapid production of wealth and such immediate economical progress would have been impossible.\*

The Australian policy is for the state to retain the lands until they attain a commercial value, and meanwhile to lease them out on terms long enough and at rents low enough to attract settlers. This plan has been really more advantageous for the sheep-growers, who were thus enabled to put more capital into stock, so that many of them are rich in flocks and in money from the sale of the produce, and are able at the expiry of their licenses to buy the land from the Government at good prices. The inflow of public money from a source possessed by no other states old or new, and one quite independent of the taxable resources of the people, was likely to lead to an embarrassment of riches if the fortunate colonies had not adopted the plan of building railroads in advance of private enterprise. The construction of a railway net-work to connect the prosperous but scattered settlements of this vast continental island is not only good public policy, but under honest control, with tariffs fixed on commercial principles, will prove a profitable investment of the capital. But the outlay on these public works, until the main lines are completed, must exceed the receipts from the land-sales; and thus it comes that the public debt of New South Wales and the other colonies is growing at the same time that the revenues are abnormally large.

**MILITARY FORCE.**—The Australian colonies have busied themselves lately with military defenses and the organization of militia forces. This military activity was accelerated after the outbreak of hostilities in Egypt. Victoria has

expended £200,000 in the reconstruction and extension of coast-batteries, and £100,000 for gunboats, torpedo-boats, and war material. Torpedoes have been sunk in both the main entrances to Melbourne port. The colony has a paid volunteer corps, armed with Martini-Henry rifles, numbering 3,903 men. The naval armament consists of an ironclad, a wooden frigate, a sloop-of-war, and two new gunboats. Sydney is the chief station for the imperial squadron. In return for the resignation by the Home Government of all rights over land in New South Wales the Colonial Government has provided a navy-yard and a residence for the admiral. The fortifications at the entrance to Port Jackson and Sydney Harbor have been strengthened. In South Australia a permanent artillery corps has been established, a gunboat purchased, and the forts renovated. The military preparations have been made in concert by the different colonies according to the recommendations of the Governor of South Australia, Sir William Jervois, a distinguished officer of engineers, who was instructed by the Imperial Government to look into the colonial defenses.

**AREA AND PRODUCTS.**—The total area of the Australasian colonies is 3,103,903 miles. Their aggregate male population in 1880 was 1,499,258. The total population of Australia, by the census of 1881, was under 2,250,000. The land in cultivation was 6,371,238 acres. The aggregate agricultural production of that year was as follows: 36,846,950 bushels of wheat, 17,766,875 bushels of oats, 3,506,191 of barley, 6,335,239 of maize, 424,155 tons of potatoes, nearly 1,000,000 tons of hay, and 1,871,861 gallons of wine. The flocks and herds numbered 1,064,655 horses, 7,878,782 cattle, 65,915,765 sheep, and 882,337 swine. There were 24 animals, but less than one inhabitant, to the square mile. The revenue raised by the colonists has increased from £15,927,000 in 1879, to £20,776,000 in 1882. The imports in 1880 amounted to £45,060,000, and the exports to £48,866,168, a trade of £35 *per capita*.

**VICTORIA.**—The compromise Cabinet of Sir Bryan O'Loughlen held out only because the two leading parties in the colony were neither of them strong enough in the House or in the country to make a Government, and so they both of them gave some amount of support to this Government, which represents no particular views or party. Mr. Berry attempted to carry a vote of confidence, on the ground that the Government had purchased pipes and railroad-wagons in England, but the Parliament was not caught by such a demagogic appeal. A tariff commission has been hearing the views and complaints of all classes regarding the tariff. The farmers complain of the high price of implements. A manufacturer of steam-engines declared that the complex tariff works injuriously for his branch. The brewers asked for a rebate of duty on barley converted into malt, while the grain-growers demand the con-

\* Even in America, the theory of the homestead laws is ignored since modern transportation has rendered the production of animal products, on a large scale, on outlying lands, profitable. Such is the exigency of economic laws, that the advantage given to money-lenders, by the sanguine disposition of farmers to improve their property with borrowed capital, without reckoning on years of failed crops or low prices, has been used to bring about a new distribution of land, and the building up of large properties in some of the settled states, since the cultivation of cereals on the extensive system has become profitable; although the introduction of the Metayer system has also much to do with these changes. The vastness of some of the pastoral estates in Australia is illustrated by an auction-sale which took place at Melbourne, at which 385,000 acres of first-class riverine land, the greater part freehold, stocked with high-grade sheep and blooded cattle, with residence, pleasure-grounds, shops and tools, steam-machinery, and all improvements equally complete, changed hands for the sum of £447,000.

tinuance of protection against the superior barley of New Zealand. In obedience to a general demand Parliament repealed the stock-tax, which enhanced the price of meat in Melbourne, hampered the meat-preserving industry, and helped to divert the Riverina trade from Melbourne to Sydney. The trade of the Riverina country, which formerly went to the nearer Melbourne, now finds its outlet by the railroads of New South Wales and the steamers and railroads of South Australia. The extension of the New South Wales Railroad to Hay threatens to draw away this valuable trade from Melbourne. The repeal of the duty on live-stock, imposed at the height of the protectionist fever under the Berry Government, by which 9d. is collected on every sheep brought across the Murray from New South Wales, is not sufficient to restore the Riverina traffic to Melbourne. A lively war of rates was opened between the two Governments. In this contest Victoria is at a disadvantage, notwithstanding the shorter length of its trunk-line, as it was built when wages were at their highest point. The considerable revenue derived from the imported goods supplied to the interior of New South Wales furnishes a fiscal motive for sacrificing the railroad profits in this freight competition. This danger to the commerce and revenues of Victoria is the principal reason for the progressive railroad policy which has been inaugurated. No less than fifty-six new lines have been projected, at a total estimated cost of £2,500,000. One feature of the scheme is to tap the Murray at three points, so as to regain the Riverina traffic. A loan of £4,000,000 is to be raised in England. A new land policy was also inaugurated. Under the old homestead law, the land was all falling into the hands of speculative capitalists. To check this, a land-tax was imposed, which discouraged all purchasers.

A harbor-trust act authorizes a loan for the project of making Melbourne accessible to large vessels.

The diamond-drill, which passes through the hard basalt with rapidity to great depths, and does away with the expense of sinking shafts to explore for gold, has come into common use in Victoria, and given a great impetus to the mining industry.

The census of Victoria, taken April 3, 1881, gives the population as 452,083 males, and 410,263 females; total, 862,346. This shows an increase in ten years of 12·7 per cent in the male, 24·1 per cent in the female, and 17·9 per cent in the total population.

**NEW SOUTH WALES.**—The public affairs of New South Wales are held in the firm grasp of Sir Henry Parkes, the Premier, and Sir John Robertson, who are fortified in their position by the enormous patronage which they dispense, owing to the working of the Robertson land laws. These laws discourage immigration and agriculture, although they do not interfere with the development of sheep-culture.

Through their operation the public domain is being rapidly alienated, and falls exclusively into the hands of land monopolists, who have purchased all the lands opened by the new railways in enormous tracts. These purchasers are the squatters, who have already stocked the land with sheep, and grown wealthy from the produce. The dryness of the season of 1882 only partly checked the pastoral prosperity. An act to promote artificial irrigation, called the water conservancy act, was suggested by the late droughts. Under it many districts have raised money to carry out extensive schemes of water storage. Wages in New South Wales were never so high, or speculation so rampant.

The population of New South Wales increased in ten years 50 per cent, being over 750,000 by the census of 1881. Two thirds of the increase was due to the natural excess of births over deaths. The immigration is mostly from the neighboring colonies. The wool export increased from £4,750,000 in 1871 to over £7,000,000 in 1881. Including hides, tallow, preserved meat, and live-stock, the total export of pastoral produce amounted to £8,750,000. The number of sheep in the colony increased from 16,000,000 to 33,000,000. The number of cattle barely increased, large numbers having been sent away to Queensland; the local price of beef has risen. The cereal product has increased but little; droughts and rust discourage agricultural enterprise, and the best wheat-lands are remote from the coast. Although gold production shows no increase, the development of tin and coal mining has increased the value of the mineral product over one third in ten years. The coin and bullion in the colony has increased from £10,500,000 to £36,500,000, or from £16 to £35 *per capita*; some proportion of this remarkable accumulation represents English capital, which has been largely sent over for investment in the latter half of the decade. The amount of the discounts and mortgages rose from £9,500,000 to £27,000,000.

**QUEENSLAND.**—Sugar-growing is rapidly assuming the proportions of a leading industry in this colony, though it will take many years at the present rate of increase for the product to supply the markets of Australia. An important movement for the separation of Northern Queensland from the rest of the colony has been set on foot. The Brisbane Government and people desire to become dissociated from the sugar-planters, and relieved of responsibility for the abuses of coolie labor. The whole northern, tropical coast of Australia may be united into a single colony, governed on the basis of "black" labor, and with the idea that this form of slavery is indispensable for the development of the region. The Government geologist reports the discovery of numerous and thick seams of coal near Palmersville.

Western Australia, which has made but slow progress hitherto, is developing fast under the tide of immigration which has set toward the Kimberley and other rich tracts of pastoral



territory. Railroads are projected from Perth, the capital, to Albany, King George's Sound, and the northern districts.

**NATIVE QUESTION IN NEW ZEALAND.**—The only settlement which is promised for the native question in New Zealand, which has been reopened by the recent invasion of the North Island by new colonists, is the expulsion of the Maoris from their remaining lands and the rapid extinction of the dying race. The Maori chief, Te Whiti, who gathered about him about two thousand natives on the west side of the North Island, and offered a passive resistance to the confiscation of the Parihaka tract, was first approached with an offer by the colonial authorities to settle his followers on other lands. Te Whiti was a pious Christian, who had received his instruction from Lutheran missionaries. He preached in the monthly assemblies at Parihaka that God would preserve their hereditary lands to the natives if they bore themselves worthily. The tract in dispute belonged to the Taranaki tribe, and had been declared confiscate twenty years before, as a penalty for an insurrection, in which nearly all the natives of the west coast took part. They were left in possession, and the Government subsequently promised that they should have the title restored to them. Now that the land had become valuable for occupation, the Government proceeded to carry out the old decree. The religious enthusiast who led the natives was opposed to all forcible resistance, but refused the reservation which was offered in the place of the Parihaka block. They asserted their legal rights by removing the fences set by the surveyors, and by many of them squatting in the tract and plowing up the land. The Government, on the pretext that the monthly meetings constituted a danger to the peace, took peremptory measures against the natives, who were only asserting their treaty rights by peaceful and proper methods. The Minister for Native Affairs, Mr. Bryce, at the head of the armed constabulary and a strong force of volunteer rifles, marched into Parinaka Pah, the Maori village. Not the slightest opposition was offered. Te Whiti was arrested, with Tohu, his principal lieutenant, and the other chiefs, on the charge of seditious practices and language. Their followers were taken away from their lands and distributed among the different tribes of the Maoris. A special law was passed by the Legislative Assembly, by virtue of which the chiefs were kept in close confinement, without trial, until the next session. Sir Arthur Gordon, the Governor of the colony, did not approve the expulsion of the native squatters from the holdings to which they had obtained a presumptive right by *bona fide* settlement, which should enable them to have their claims judicially examined. A correspondence was carried on over this point between the Governor, the Prime Minister of the colony, and the Secretary of State for the Colonies. In

April Mr. Hall, the Prime Minister, resigned on account of ill health. Sir Arthur Gordon, with a singular disregard for constitutional precedents, went to the leader of the Opposition, Sir George Grey, who was twice Governor of New Zealand before the parliamentary constitution was conferred, and has been at different times since the Prime Minister, with the proposition that he should form a ministry which should be actuated by a keener sense of justice to the natives. Besides the special act under which Te Whiti and the other prisoners were held in prison, the ministry had carried an act of indemnity to protect them from the consequences of their high-handed proceedings. Sir George Grey, as a true colonial politician, not only declined to attempt forming a Cabinet, but when the acts were brought forward in the Assembly, to the disappointment of his own followers, he expressed complete approval of the course of the Native Minister. The ministry was reconstituted under Mr. Whitaker, previously Attorney-General, as Colonial Secretary, with Major Atkinson as Colonial Treasurer, Walter Johnston as Minister of Public Works, and Mr. Bryce as Minister for Native Affairs. Te Whiti, after being kept in prison for many months, was given a tour in railroads and steamers all through the South Island, in order to impress him with the power and superiority of the white conquerors before setting him at liberty.

A deputation of Maori chiefs visited England in the summer for the purpose of enlisting sympathy in behalf of their dying race. It is proposed to defend their remaining possessions by confiding them to a trust association in England, which will obtain the best prices for them, and invest the proceeds so that they will yield annuities to the remnant of the race. There are ten million acres, which will yield £4,000,000 within eighteen years, and leave land of the value of £14,000,000 for subsequent sale and distribution among the Maoris and shareholders of the association.

**REVENUE.**—The revenue of New Zealand in 1881-'82 was £3,488,170, being £190,650 in excess of estimates; £125,000 of which excess was under the head of customs and £11,115 under that of stamps, showing increased consumption and accumulation of capital. The railroads produced less than the estimate, but the receipts were largely in excess of those of the previous year. They pay 4 per cent net on the cost of construction. The land-sales amounted to £317,000, of which £34,000 was in deferred payments, showing the success of settlers who took up land without any capital. The deposits in the savings institutions, chiefly in the Government banks, give another indication of the general prosperity. These deposits aggregate £1,549,000, belonging to 61,000 depositors. Of the population of New Zealand, which has increased in ten years from 266,988 to over 500,000, the class of workers for wages,

including female servants, numbers 323,000; 96,000 who do not work for wages pay no property-tax—that is, are not possessed of property to the amount of £500—and 68,445 pay property-tax. The incidence of taxation is about £1 *per capita* for the wage-earning class; £2 13s. for the intermediate class; and £6 8s. 6d. for the class which pays the property-tax, but the impending reduction of this tax to one half the present amount will reduce the average burden of this class to £4 10s. The public debt of New Zealand, after deducting £2,226,000 of sinking fund, stands at £27,680,000. It is to be increased £4,000,000 by borrowing in London £1,000,000 a year for three years and by a special loan of £1,000,000, in order to complete the trunk lines of railroad and some other public works.

**RAILROADS.**—The capital already invested by the Government in railroads amounts to about £11,000,000. Of the 1,333 miles constructed, 875 are in the provinces of Canterbury and Otago, in the South Island, while in the North Island only 458 miles have been opened. The colonists think of expending a million sterling a year of borrowed capital on the railroad development of the North Island, though the Opposition party expressed alarm at the proposal of the new loan. The running expenses of the railroads are light, averaging 47½ per cent of the gross receipts. The state will receive benefits from the sales of public land in the North Island, which it could not in the older provinces, where the soil was already monopolized by owners of enormous estates. Here the early squatters or run-holders were permitted to convert their leases, covering blocks of tens of thousands of acres, by pre-emption into titles in fee simple. The agricultural lands in the North Island are being rapidly taken up by immigrants from England, most of whom are possessed of capital. This rush is due to the agricultural depression in Great Britain. There are no markets at present accessible to the produce of the immigrants. Hopes have been raised by the successful shipment of a cargo of 7,000 frozen sheep to England which were sold in London as first-class meat.

**LAND SYSTEM.**—A new feature in the land system is the Government proposal to grant leases at a low rent, with fixity of tenure, and the privilege of renewing the lease from term to term. The tenancy must in no case exceed 640 acres, and can not be held along with other land. The Colonial Treasurer, Major Atkinson, has made a novel legislative proposal, which may not become law, but which illustrates the proneness of these active colonies to entertain projects of social reform. This is a scheme of compulsory Government insurance, by which about £40 should be collected from every young person in the colony, in weekly payments, between the ages of sixteen or eighteen and twenty-three; this would afford sick-pay, a superannuation allowance of 10s. a week

from the age of sixty-five, and a pension to widows of 15s. a week. A system of voluntary Government life-insurance has been in successful operation for twelve years. The Government offices do more business than all the private companies combined, and derive from it a profit. The Post-Office and Government Savings-Bank assist the laboring classes in the payment of small life-insurance premiums. Another institution of a similar kind, in which New Zealand leads older countries, is the administration of marriage settlements, trusts for infants, bequests, and other private trusts, by an official trustee. The aggregate borough and county valuations for land-tax and property-tax in New Zealand are £236,000,000. In 1870 the total valuation of real and personal property was £50,000,000.

The wool exports of New Zealand for the year ending September 30, 1881, amounted to 60,477 pounds, valued at £3,001,288. Gold, wheat, oats, and barley, kauri-gum, and rabbit-skins, are the other principal exports. Rabbit-skins are being exported also from Victoria, where a premium is paid, as in New Zealand, for the destruction of these pests to the farmer. The exports of 1882 show a marked increase over the preceding year. A line of steamers is to run from New Zealand to England, for which an annual subsidy of £20,000 has been voted by the Assembly at Wellington.

**AUSTRIAN ELECTORAL SYSTEM.** Austria really has three parliamentary bodies—the Upper and Lower Houses of the Reichsrath and the Delegation to the joint Parliament with Hungary. Its electoral law is one of the most complicated in Europe; like a strange piece of variegated work, the colors of the present are confounded with those of the past time. Resting at once on representation of orders, a relic of former periods, and upon a direct vote which has been recently won, it bears the characteristic stamp of Austria, by observing the distinction of nationalities. The body of electors is, therefore, composed of four divisions—the large proprietors, the cities, the chambers of commerce, and the country communes.\*

Of the three hundred and fifty-three members which compose the Reichsrath, a word used to designate the whole Parliament and also the Lower House, the first group consists of eighty-five, who are elected by the large land-holders who pay a direct land-tax of not less than two hundred and fifty florins, in Bohemia, Moravia, and Silesia; of two hundred florins in Lower Austria; and of a hundred florins in the other countries, except Tyrol, where it is fifty florins: but the elector must be a noble. That dignity is not required elsewhere; it is sufficient to possess an ancient estate which is entered in the register of the province. Such an estate can not be divided, but it may be sold, and the purchaser becomes an elector, even if the transfer was made only a few days before the election. Hence arise bad

\* M. A. Keynaert, "Revue Générale," July, 1881.



transactions and speculations, that debase the right of suffrage to an article of traffic, which turns most frequently to the advantage of the Germans and the Jews, who are the largest owners of personal property. This land group, which, according to its nature, should represent the landed and noble aristocracy, has been democratized in another respect. If the electoral census is differential, if it is scaled by kingdoms and states, it is subject, on the contrary, to a leveling equalization in the interior of the same circumscription. Whether they pay the minimum tax, varying from two hundred and fifty to fifty florins, or an enormous tax like Prince Adolph Schwarzenberg, whose assessment is one million florins, yet all the great proprietors are placed on the same level. They have only a single vote, and are especially included in a single electoral college, excepting, however, Dalmatia, which has four, and Galicia six, colleges. Thus, as a striking illustration, the proprietors of Bohemia assemble on an appointed day at Prague, and elect the twenty-three deputies to the nominating convention. Now, as the two parties are very nearly equal in strength, the influence of the Government is almost always sufficient to give the majority to the Germans, and to exclude the Slavs from all representation. Thus, the influence of the rich old families of Bohemia and Moravia, who are the owners of thirty villages, is absolutely paralyzed by the comparatively small proprietors, who are Germans and Israelites, and who bought, only a short time before the election, the land which carried the right to vote. An unsuccessful attempt has been made to divide the landed group of Bohemia into three electoral colleges. Besides the exceptions of Dalmatia and Galicia from the rule of one electoral body, another exists in Bukowina, which has three representatives. The greater part of the proprietary electors are Roumanians, and one electoral body gives them a decided superiority. To prevent this unfavorable result to the Germans, the group has been divided into two bodies or *curia*, of which one is composed of ecclesiastical dignitaries of the Greek rite, and the prior of a monastery, comprising in all seven electors, who generally elect the governor of the province for deputy.

The ecclesiastical *curia* of Bukowina is not the only exceptional feature of that electoral district; for the voter can be represented by proxy. Then, women of twenty-four years of age, and legally independent, have the right to vote. They vote according to the local law, generally by their husbands, or, if they are daughters or widows, by proxy. The right to vote is also given to corporations and societies whose landed interests have elevated them to the class of great proprietors, especially to funded institutions, to schools, churches, and hospitals, whenever there exist express provisions in the provincial law. The right is for them exercised by a person designated in the charter of

the institution, or by a special delegate. The elector can, at the same time, vote for himself and as a *mandataire*. The same proprietor can hold the right of suffrage in different districts, and it is this fact which has secured the vote by proxy.

The second and third groups embrace those engaged in commerce, industrial pursuits, and the liberal professions. These are the ancient citizens. The two groups have one hundred and thirty-six *mandats*, which is four more than the rural communes, which have one hundred and thirty-two. Nevertheless, the population of the open country is much more numerous than that of the cities. According to the census of 1869, Cisleithan Austria had 8,000,000 inhabitants devoted to agriculture, and only 2,500,000 engaged in commerce and industrial pursuits. In the Slav provinces the disproportion is still greater. But this is not the only disadvantage which the rural population suffers; for, while the other groups vote directly, the country electors choose from among themselves certain persons, who in their turn make a choice of the deputies. At the primary election, five hundred inhabitants choose one. It is still a *mandat*, which in some respects resembles the *mandat* of the great proprietor; but, while the latter is free and personal, the first is forced and collected. Such is the rule. But, in order to complete the complication, aside from the "indirect" electors, there are in the rural communes "direct" electors, who are relieved from the primary vote, and who consist of owners of landed estates, but who do not pay a sufficient tax to place them among the great proprietors.

Whence comes this shocking inequality? It can be explained only from the fact that the electoral law is the work of the German party, which has favored the cities, where the population is principally German and liberal, to the detriment of the open-country people, and especially the conservative and Slav element. Such is the case also with the chambers of commerce, nearly all of which are in the hands of a growing liberal majority.

The great proprietors, the citizens, and the peasants are the exclusive possessors, although unequally, of the political influence of Austria. To this fundamental division of the electoral body there is added another of great weight likewise, and which equally tends to secure the pre-eminence of the German population. It is the division of *mandats* among the numerous nationalities adjacent to each other or confounded together in the empire. This division is in no sense proportional, nor is it made according to the number of the population, or the amount of taxes. Austria is estimated to contain 13,000,000 Slavs, 500,000 Italians, 200,000 Roumans, 600,000 Israelites, and 7,000,000 Germans. If universal suffrage existed, or if the election were made on an equalized basis, the majority would undoubtedly be steadily on the side of the Slavs. It is far from being so

now. The Germans, although less than half of the population, have in the House actually more than two hundred of the three hundred and fifty-three deputies. In Bohemia, in particular, the law of 1873 assigns thirty-four deputies to 2,500,000 Slavs, and fifty-six deputies to 1,500,000 Germans.

One can conceive how this law must raise opposition. It has been assailed vigorously, especially by the Poles, who refuse to assent to it, notwithstanding all the independent concessions that have been offered to them. When the bill was presented, on February 15, 1873, M. Casimir de Grocholski denounced it as a flagrant violation of national rights, and withdrew, at the head of all his friends, from the Polish bench. Nevertheless, the bill was passed some days afterward by one hundred and twenty votes to two, in the absence of the Czech and Polish deputies.

The agitation for an electoral reform has commenced, and penetrated the most diverse classes of society and the most opposite political parties. Operatives and peasants, socialists and democrats, progressives and conservatives, agree in the desire to modify the law, although their views have been very different relative to the extent of the modification. Some attempts at reform have been made in the Reichsrath, and an important measure has passed, by which the qualification of voters was lowered from ten to five florins in towns, and the number of voters considerably increased. In the unique political condition of Austria it is the so-called Liberal or Centralist party which will lose by the extension of the franchise, and which opposes it as a danger to its pretended Liberal principles. Liberalism in Austria, as above stated, means Germanization and the continuance of German domination. The Liberal, or German Constitutional, party, with which Prince Auersperg fell in 1879, was, like the Liberals of Germany and Republicans of France, brought into discredit by the financial speculation and corruption which flourished under their rule, while its main political aim was the reactionary one of combating the Czechish movement, and keep the Czechs and other Slavic races in political subjection to the Germans. The Clerical party, on the other hand, was in thorough sympathy with the Czechs, who had preserved a haughty silence ever since the dual Constitution had left their great nation unfranchised, but who were now thoroughly aroused. The Clericals were thus the advocates of popular rights. They received a partial support from the German Conservatives. In the Taaffe Ministry the Czechs found recognition for the first time. They have made great headway in their struggle to preserve the Bohemian language and national ideas and customs from the extinction systematically planned by their German rulers. The success of the Czechs has given heart to the various lesser nationalities in Austria. The distinctive policy of the Taaffe Government is

to favor the Slav races and reverse the process of forcible Germanization. The new electoral law was not brought in by the Government, but adopted, and its limits set after it was under discussion. Under this new law the representation will be something like 183 Germans and 167 of other nationalities; while, if the programme of the new German People's party were carried out, class representation abolished, and the suffrage greatly extended, it would be 225 of other nationalities against 127 Germans. Placing the limit at "five-gulden men," and not lower, was done out of regard for the German dread of the "Slavic inundation." Count Taaffe's Ministry does not represent either of the warring elements, but acts as an intermediary between them. The working majority with which he carries through his compromise measures, often by a very close vote, contains a considerable element in moderate sympathy with German prejudices. If he should be driven by an adverse vote to dissolve Parliament, a strong phalanx of Czechs and Clericals would be returned under the five-gulden qualification, which would drive him more rapidly in the course which he is pursuing.

The electoral question was introduced in the Provincial Diets, and gave rise to sharper struggles than attended its discussion in the Reichsrath. With the progress of decentralization the Diets are becoming powerful political bodies. The Slavs demanded, reasonably enough, that the electoral limitation should be lowered to the five-florin basis, and attacked the system of class representation. Where the German party would gain, as in Lower Austria, they eagerly supported the electoral reform, but set their face firmly against it in Bohemia, where it would cost them the supreme control which they now exercise.

The House of Lords is neither a popular body nor elective. Like the majority of similar bodies in Europe, it rests upon constitutional right, inheritance of land, or nobility, and the appointment of the Emperor. It is composed of the elder princes of the imperial house, members of right, the nine archbishops, and the seven bishops, who have the rank of princes; the great lord-proprietors, to the number of fifty-three, members by inheritance; and members appointed for life by the Emperor.

The half-Austrian and the half-Hungarian Parliament meets alternately at Vienna and at Pesth. Its authority is limited to the common interests of the empire. Each delegation consists of sixty members, chosen by the Cisleithan and Transleithan Parliaments. The appointments are made in accordance with a proportional division of the whole number among the distinct nationalities.

The variety of nations and languages in Austria has not only produced a strange and complicated electoral system, but it is manifest in the diversity of parties. This does not arise, as under most of the constitutional governments,



exclusively from a diversity, more or less intense and profound, of ideas and political, social, or religious aspirations, but is incessantly nourished by old national memories and the old prejudices of race.

"Centralists" and "Federalists" compose the radical denominations of parties. Apart from the dualism of Austro-Hungary, the state is a unit, and derives its expression from the Constitution of December, 1867. By the force of that instrument, the empire is based upon a single government, with two representative Houses and one responsible minister. This condition of affairs was effected by the Germans, and they desire not only to preserve but to extend and develop it. Not satisfied with placing in the hands of the General Government, whose seat is at Vienna, all the principal interests of the monarchy, nor with having modeled to their liking and arranged to their profit the electoral system, they aspire to secure the predominance of the German spirit and German culture everywhere, or rather to *Germanize* Austria entirely. As M. de Kaiserfeld lately said in the Diet of Styria, who afterward was made President of the Reichsrath: "Austria should be a German state in language and education; the German should be spoken by all persons, and serve as a political bond to all the races and nationalities of the empire; the unity of language, an expression and symbol of the state, is the *sine qua non* condition of the existence even of Austria. Consequently, all the citizens, whatever may be their mother-tongue, Czechs, Moravians, Slovaks, Poles, Ruthenians, Slovens, Roumans, and Italians, should submit to the baptism in the German school, if they desire to take a part in the public affairs of the state." This was the demand of Kaiserfeld in the name of his party. Some one answered: "You desire to Germanize the empire; you are not Austrians, you are Germans." He protested in reply, "There are no Austrians in Austria—only Germans!" The objects of the German party are the same at this day. Although the Constitution proclaims the equality of languages, yet a profound discontent has arisen under the just concessions in that respect made to Bohemia and Moravia. For the purpose of a reaction against these measures, and definitely to secure to the German language the ascendancy over the other idioms, the Progressives have obtained the examination of a special committee on propositions, tending, in the first place, to regulate by law the use of languages in Bohemia, and, secondly, to recognize the German as the official language of the state.

Thus centralism consists in the political and social leadership of the German race for the very existence of the state. But their partisans do not all go to this length. The Centralists, properly so called, do not limit their unifying aspirations to Cisleithania; they cross the river, and desire to rupture the compromise with Hungary. Instead of that arrange-

ment, already twice confirmed, they desire to substitute a "personal union," and, consequently, to abolish the common delegations. Others, on the contrary, yield to the existing relations, and desire to preserve the political and administrative division, so that the dualism of Austro-Hungary shall remain.

In the face of German centralism, federalism raises itself, with claims of effecting advantages to the nationalities, and especially the Slav nationality. As there are two groups among the Centralists, so likewise the Federalists are subdivided into two factions on the basis of more or less extensive claims. The Federalists, especially those of Bohemia and Moravia, are, like the ultra-Germans, but under another designation, and for another object, the avowed adversaries of dualism. To that agreement—which, according to their views, has violated their historical right in destroying the equilibrium between the states essentially distinct and independent of each other—they seek to substitute a general federation embracing all the countries of the empire, including Hungary. This is a complete negation of the supremacy of Austria, and involves the destruction of the constitutional charter. In 1877 Count Beleredi said, "Historical Austria, which God has designated in this world to be the protector of the Church, the guardian of the rights and liberties of these countries and peoples, should become a confederation of states, united by solemn compacts, under the scepter of the illustrious house of Hapsburg."

The other faction of "autonomists," on the contrary, do not desire to disturb the general organization of the empire, nor the compromise with Hungary. They look, in the first place, to the rights of their respective countries, for the advantage of which they demand an extension, in different degrees, of their independence, such as is already more or less consistent with constitutional law. Among these the Poles must be classed, who, in hatred of Russia, dread the exaggerations of Slavism, and who, while desiring a large autonomy for Galicia, desire to preserve Austria strong and powerful. Nevertheless, if there exists a real difference between the Federalists and the Autonomists, yet in the daily discussions it is not apparent.

As in Germany the "Particularists" belong to the ranks of the Conservatives, whether Catholic or Protestant, while the partisans of centralism are grouped under the flag of liberalism, so in Austria the Federalists, in the general acceptance of the term, are the Conservatives, and the Centralists the Liberals. However, it should be observed that the intermingling is not absolutely complete between the Autonomists and the Conservatives, nor between the Centralists and the Liberals. The flag of the Federalists shields in effect the young Czechs and the Poles; all of the former, and a very large number of the latter, pay homage in different degrees to liberal ideas. The tendency to autonomy unites them with the

Conservatives. The ground of common action is not strictly the political question, but the national question. So in the ranks of the Centralists are Conservatives whose alliance with the Liberals rests only on their aversion to federalism.

The same observation may be made relative to another division of parties—the "Constitutionalists," who are Centralists or Liberals, and the "Anti-constitutionalists," who are Federalists or Conservatives. But the truth is, that there are partisans and opponents of the Constitution in the ranks of the Liberals as well as of the Conservatives.

The Centralists or Liberals are likewise designated as "the Right," and the Autonomists or Conservatives as "the Left." Here were lately found all the distinctions of the French Lower House—as Left, Left Center, Extreme Left, Right, Right Center, Extreme Right. Ordinarily there are different degrees of the liberal and conservative scale, but the space and duration of these are essentially variable. Accidental rather than permanent distinctions produce fluctuations in the liberal or conservative policy, and are founded more often on divergence of tactics than disagreement in principle.

**AUSTRIA-HUNGARY**, an empire of Central Europe composed of the federated kingdoms of Austria and Hungary, which were definitely organized as separate states in 1867. Both crowns are hereditary in the Hapsburg family. The Emperor, Francis Joseph, born August 18, 1830, succeeded his uncle, Ferdinand I, who abdicated in 1848. The heir-apparent is the Archduke Rudolf, the Emperor's only son, who was born August 21, 1858. Common affairs, relating to the common army and navy and foreign policy, are referred to delegations of deputies from the two Parliaments, to which the Common Ministers are responsible. The Common Ministers at present are: Count Kalnoky, who succeeded the late Baron Haymerle as Minister of Foreign Affairs in November, 1881; Lieutenant Field-Marshal Count Bylandt-Rheydt, appointed Minister of War in 1876; Baron von Kallay, Minister of Finance, appointed after the resignation of Baron Szlavy in May.

The Austrian Ministers are: Count Taaffe, President and Minister of the Interior; General Count Welsersheimb, Defense; F. Ziemiałkowski, without a portfolio; Count Falkenhayn, Agriculture; Baron Eybesfeld, Education; Dr. Dunajewski, Finance; Baron Friedenthal, Commerce; A. Prazak, Justice.

The Hungarian Ministers are: Tisza, President; Baron B. Orczy, Minister of the Court; A. de Trefort, Education; Baron Orczy, Defense; Baron Kemeny, Agriculture and Commerce, and *ad interim* of Public Works; B. de Komor, of Croatia-Slavonia; Dr. Pauler, Justice; Count Szapary, Finance.

**STATISTICS.**—The area and population of the two monarchies and of their provinces, according to the census of December 31, 1880, were as follow:

PROVINCES OF THE EMPIRE.	Area in square miles.	Population.
<b>GERMAN MONARCHY:</b>		
Lower Austria (Unter der Ens).	7,654	2,390,621
Upper Austria (Ober der Ens) ..	4,631	759,620
Salzburg .....	2,767	168,570
Styria (Steiermark) .....	8,670	1,213,597
Carinthia (Kärnten) .....	4,005	348,730
Carniola (Krain) .....	3,856	481,243
Coast-land (Küstenland) .....	3,084	647,834
Tyrol and Vorarberg .....	11,324	912,549
Bohemia (Böhmen) .....	20,060	5,560,819
Moravia (Mähren) .....	8,583	2,158,406
Silesia (Schlesien) .....	1,987	565,475
Gallcia (Galizien) .....	30,307	5,958,907
Bukowina .....	4,035	571,671
Dalmatia (Dalmation) .....	4,940	476,101
Total, German monarchy .....	115,903	22,144,243
<b>KINGDOM OF HUNGARY:</b>		
Hungary and Transylvania .....	108,258	18,778,266
Croatia and Slavonia .....	16,773	1,198,408
Town of Fiume .....	5	17,865
Military Frontier .....	7,890	701,546
Total, Hungary .....	132,929	15,695,184
Total, Austro-Hungary .....	240,942	37,839,427

The number of inhabitants to the square mile is 159 for the whole empire. The population of Austria has increased only 8·4 per cent since the census of 1869; and that of Hungary has remained almost stationary, the increase being but 1·8 per cent. This is chiefly owing to a high rate of mortality. The Germans constituted 38 per cent of the population of the German or Cisleithan part of the empire, and 20 per cent in the Hungarian or Transleithan part. The Slavonian races predominate, forming 49 per cent of the population of Austria and 16 per cent of that of the Hungarian dominions. The Magyars constitute 58 per cent of the Hungarian population. They form no appreciable proportion of the population of Cisleithania. The population of Vienna is 705,402, against 607,614 in 1869; but including the suburbs it numbers about 1,800,000 inhabitants. Of the other principal towns of German Austria, Prague contains 162,318 inhabitants; Trieste, 144,437; Lemberg, 110,250; Gratz, 97,727; Brünn, 82,665; and Cracow, 66,095. Of the Hungarian cities, Buda-Pesth has 359,821 inhabitants; Szegedin, 50,988; Holdmezo-Vasarhely, 74,094; and Maria-Theresiopel, 61,655. Two thirds of the population of Hungary are engaged in agriculture, but the proportion is diminishing and the relative population of the towns increasing. The density of population in Hungary is 125 per square mile, against 191 in the Austrian dominions. The percentage of the population adhering to each of the various religious denominations is as follows:

DENOMINATIONS.	Austria.	Hungary.	Whole empire.
	Per cent.	Per cent.	Per cent.
Roman Catholics ...	80·4	48·6	66·4
Greek Catholics ...	11·7	10·2	11·0
Evangel. Protestants ...	1·7	20·4	10·0
Byzantine Greeks ...	2·5	16·7	9·0
Jews .....	8·5	3·6	3·2
Unitarians .....	...	0·3	0·2
Catholic Armenians ..	...	0·1	0·1
Other sects .....	0·2	0·1	0·1



The increase of the Jewish race exceeds in a remarkable degree that of the rest of the population in the dominions of the Austrian crown. The number of Jews in Cisleithan Austria increased between 1869 and 1881 from 822,220 to 1,005,563, or 22·9 per cent, representing a mean annual increase of 2·1 per cent. The rest of the population increased from 19,395,311 to 21,125,142, or 7·9 per cent, the annual increment being 0·6 per cent. Between the censuses of 1857 and 1869 the increase of the Jews was 32·4 per cent; of the Christians 10·2; between 1850 and 1857, among the Jews 30·3 per cent, among the Christians 3·2 per cent. Previous to 1850 the enumerations of the population were taken in connection with the military conscription. As the young Jews were particularly addicted to fraud and bribery for the purpose of avoiding military service, and in the eastern provinces were accustomed to place themselves across the boundary when the time of enlistment approached, the difference in the returns for the two classes was less striking. Between 1834 and 1837 the reported increase among the Jews was 5·2 per cent, against 2·3 for the remainder of the population; in the enumeration of 1840, 5·4 against 3 per cent; in the one taken in 1843, 5·7 against 2·9 per cent; in that of 1846, 7·6 against 3·1 per cent; in that of 1850, 6·3 against 0·6 per cent. The normal rate of increase among the Jewish race is notoriously greater than among the other peoples of Europe. The main cause of their rapid growth in Austria, however, is the continued immigration from the east of Europe. The increase varies greatly in different parts of the empire, and depends upon the opportunities for their favorite occupations; but everywhere except in a few rural localities there has been an increase. In Lower Austria it was 81·5 per cent in the twelve years; in Salzburg 146·8 per cent; but in Bohemia only 4, and in Moravia only 2·9 per cent. They have settled in districts of Tyrol where a few years ago there were none. In Carniola, Carinthia, and Istria there are still but few; yet the number has increased two, three, and five fold. In the Bukowina, which receives a steady stream from the neighboring Roumania, and where they are thickest, numbering 67,418 to 502,181 other inhabitants, the increase has been 41·1 per cent. The increase is naturally greatest in the cities. Vienna counts 72,543 Jews among its 705,402 inhabitants. They have increased in this capital 80·2 per cent, while the Christian population has grown only 11·5 per cent. They also people the suburbs of Vienna and form a large proportion of its floating and day population. In Prague, with 155,813 inhabitants, the Jews increased 3,515, or 26·8 per cent, and the rest of the population 5,415, or only 3·7 per cent. In Lemberg and Cracow the Hebrews constitute about 30 per cent, and in many of the smaller towns of Galicia four fifths of the population are Jews. In Brody, the chief of these Jewish towns, the increase was only 1·1

per cent, on account of the falling away of trade since its inclusion in the customs boundary and the consequent emigration, whereas in other towns of Galicia it was from 12 to 30 per cent. The discovery of petroleum near Boryslav had the effect of doubling the Jewish population in a few years, while the non-Jewish population showed no increase.

**MILITARY DEFENSES.**—The strength of the common army, recruited on the principle of universal liability to arms, is 296,284 men for the peace establishment, including the reserves. Including the Austrian Landwehr and the Hungarian Honved, the separate militia organizations of the two kingdoms, about 1,000,000 men can be called to arms in the event of a war. The navy consists of fourteen ironclads, ten of them first class, and armed with guns ranging from six and a half tons in weight to the twenty-five-ton guns of the *Tegethoff*.

The territorial organization of the army was instituted, in principle, when the new military system was introduced in 1868. It was not only an essential element of the system of universal service adopted from Germany, but was a political prerequisite amid the diversity and ethnic rivalry of the Austro-Hungarian population. Yet up to the present the actual organization of the army during the term of active service has been directly contrary to the theoretical basis. In order to preserve a national feeling in the sense of the German centralists, the troops of different nationalities have been commingled as much as possible. German has been retained as the language of command. The territorial organization was nominally carried up as far as divisions, but the only service the men ever saw was in temporary bodies studiously made up of battalions and troops detached from their regiments and brought together from distant parts of the empire. There was no organization of the different arms into army corps. The system of military centralization is condemned by all military authorities since the breakdown of the centralized French army and the success of the decentralized German army in 1870. Austria, in adopting the territorial basis, but practically retaining the centralized system, would be doubly unprepared in the event of a great war; aside from the practical difficulties of mobilization and the departmental services attending military centralization, the entire organization of the army into the larger divisions would have to be proceeded with after mobilization, and the regiments would not be composed of men who had served and trained together, but of troops brought together for the first time. As the political interests of the German centralistic element prevented the decentralization of the army, the pressure of the Magyars and the minor nationalities who have acquired political power has accomplished the final reform, although it was hastened by a sense of the danger of the confused and imperfect organization at a time when Austria may be called upon to

put forth her utmost military strength. The Hungarians have long demanded a Magyar army of the line, as they carried through the scheme of a Magyar militia. The alien military system has never been accepted by the majority of the Austrian subjects. When the common army has been split up into a number of little national armies it may be more efficient to fulfill the destinies of the reorganized empire, but the corps of German officers, who have ably conducted the present system, will no longer exist, and the central government will have lost one of its main props. The reorganized army of the line consists of 102 regiments, of four battalions each. This enables every regiment to mobilize one battalion of full strength without calling upon the reserves. One battalion of each regiment will be detached, the same as in France; but the bulk of the regiment will remain in the recruiting district, with its reserves ready to fall in at short notice, instead of having to be called in from some distant garrison. The fourth battalions of thirty-four regiments make up the army of occupation in Bosnia. The whole army will be organized in fifteen corps, each in its recruiting district, with the artillery, engineers, and all the auxiliary services, so that each corps can be mobilized independently, under the directions of the War Department. The division is carried still higher into three army commands, in Vienna, Buda-Pesth, and Prague.

**COMMERCE.**—The total exports of the empire, except the province of Dalmatia, which is not included in the imperial customs boundary, amounted in 1879 to 675,100,000 florins (the florin, or gulden, is a little less than fifty cents); the imports to 551,400,000 florins. Nearly two thirds of the foreign trade is with Germany; of the rest the largest share is with Turkey, Italy and Russia following next, but at a long distance.

**AUSTRIAN GOVERNMENT.**—The Austrian monarchy has a central and local Legislature. The Provincial Diets are competent to deal with matters of local administration, particularly those relating to the cultivation of the soil, and to educational, ecclesiastical, and charitable institutions, and are empowered to levy taxes for these purposes. The central body is the Reichsrath or Council of the Empire. (The system of representation in Austria is explained in **AUSTRIAN ELECTORAL SYSTEM**.) The ministry, which is responsible to the two Houses of the Reichsrath, is composed as follows: Minister of the Interior and President of the Council, Count Eduard Taaffe; Minister of Education, Justice, and Worship, Baron Eybesfeld; Minister of Finance, Dr. J. Dunajevski; Minister of Agriculture, Count Julius Falkenhayn; Minister of Commerce, Chevalier Kerner d'Auenrode; Minister of National Defense, or of the Militia, Major-General von Welsersheimb.

**HUNGARIAN GOVERNMENT.**—The Constitu-

tion of the Hungarian monarchy, consisting of fundamental statutes running back to the Golden Bull of Andrew II granted in 1222, was restored in 1867. There is only one Legislature, elected by the equal votes of all citizens who pay direct taxes to the amount of eight florins annually. The ministry is composed as follows: President of the Council, Koloman Tisza, who has charge of the Department of the Interior; Minister of National Defense, or of the Honved, Bela Szende de Keresztes; Minister Adlatus to the King, Baron Bela d'Orezy; Minister of Education and Public Worship, Dr. August de Trefort; Minister of Justice, Dr. Theodor Pauer; Minister of Public Works and Communications, Thomas Pechy; Minister for Croatia and Slavonia, Count Bedekovitch; Minister of Agriculture, Industry, and Commerce, Baron Kemeny.

**FINANCES.**—The imperial budget for 1883 places the total expenditures at 117,910,763 florins, against 117,148,549 florins in 1882. In the estimates for 1883 102,800,821 florins come under the head of ordinary and 8,774,621 of extraordinary military expenditures. Deducting the balance in hand, and the surplus of the customs revenue over the charges, there remain 99,991,763 florins to be voted by the Parliaments. The extraordinary demand for the cost of the military occupation is only 8,988,000 florins. The sums granted for extraordinary military expenses in the occupied provinces and the Crivoscie for 1882 were, 6,177,500 before the outbreak of the insurrection, and then 8,000,000 florins, and again in April 21,700,000 florins, being 2,000,000 florins less than were asked for; total, 35,877,500 florins. The gross revenue from customs is estimated at 45,269,225 florins, from which are to be deducted 1,850,000 florins for cost of collection, 600,000 florins as the fixed share assigned to Bosnia, and 28,149,000 for restitution of the excise duty on beer, spirits, and sugar exported. This export trade has so increased that an actual deficiency in the net customs revenue was anticipated, but under the operation of a revised tariff it has probably been averted.

Hungarian finances are suffering from a chronic deficiency. The deficit in the ordinary expenditure and revenue in 1875 amounted to 26,800,000 florins. This has been greatly reduced, and the greater part of the recent deficits are due to extraordinary expenditures on permanent public works, such as railroads and the protection of river-banks. The Government are constantly occupied with the problem of making them disappear. Although the debt is increasing, the credit of the Government has improved. The old six per cent debt is being converted at a lower interest.

The Hungarian final estimates for 1882 fixed the total ordinary expenses at 288,306,313 florins; transitory expenses at 3,502,447; investments, among them the Pesth and Belgrade Railroad, at 29,211,311 florins; extraor-



dinary common expenses, including the share in the 8,000,000 florins for military expenses in Herzegovina, at 7,118,210 florins. The total amounts to 328,228,281 florins. The total revenues were fixed at 301,967,214 florins. The Minister of Finance, Count Szapary, was authorized to cover the deficit, except 3,000,000 florins, by credit operations. Sums subsequently voted brought the total expenditures of the year up to 335,242,080 florins. The total deficit was 30,605,867 florins.

The budget for 1883 makes the total estimated expenditures for 1883 322,711,484 florins. The ordinary expenses are estimated at 288,848,002 florins; transitory expenses, or those which are balanced on the other side of the accounts, at 6,503,276; investments at 21,771,855 florins, being less on account of the completion of the Pesth-Theiss and the approaching completion of the Pesth-Semlin railroads; extraordinary military expenses—that is, the extraordinary expenses of the Bosnian garrisons—at 5,588,351 florins. The estimates of revenue in Hungary and Austria are somewhat problematical, being partly based upon the operations of a new tariff. The estimated income for 1883 is 301,029,896 florins, 280,732,785 florins from the ordinary and 20,297,111 florins from the transitory revenues. The Minister expected to reduce the deficit to 12,881,588 florins by new taxes and other financial measures to be proposed to Parliament.

**OCCUPIED PROVINCES.**—The Turkish sanjaks, which were placed under Austrian administration temporarily by the Treaty of Berlin, are governed by the common administration. Their area and population, as enumerated in 1879, are as follows:

PROVINCES.	Area in English square miles.	Population.
Bosnia .....	16,417	862,202
Herzegovina .....	4,308	207,970
Novi-Bazar .....	3,522	142,000
Total .....	24,247	1,212,172

Of the total inhabitants, 496,761 are Greek Orthodox, 448,613 Mohammedans, 209,391 Roman Catholics, 3,426 Jews, and the rest of various faiths. The cost of administration is ostensibly defrayed from taxes raised in the provinces; but the military subjugation of the inhabitants has cost large sums which have been supplied by the Delegations. The budget of the administration of Bosnia and Herzegovina estimates the total expenditures at 7,039,809 florins. Some of the principal items are: central administration, 150,700 florins; gendarmerie, 1,114,475 florins; military contingent, 251,000 florins; education, financial administration, and cost of collecting taxes, 348,000 florins; dotations to the clergy, 162,500 florins. The estimated revenue is 7,217,819 florins. The chief items are as follows: tithes and land produce, 2,250,000 florins; income-tax, 600,000

florins; tobacco, sale and licenses, 1,896,000 florins; sheep and goats, 204,000 florins; pigs, 42,000 florins; licenses for inns, 50,000 florins; excise duty on articles of consumption, including beer, 45,000 florins; stamps and registration duty, 300,000 florins; customs, 600,000 florins. Bosnia has been included in the customs boundary since 1880. The customs revenue contributed by the provinces has averaged only 140,000 florins a year, but they received the fixed sum of 600,000 florins annually as their share. The occupied provinces have beyond this been made to pay for their civil administration, but the Delegations are asked each year for a large sum for extraordinary military expenditures.

**FOREIGN RELATIONS.**—The outward hindrances to the definite annexation of Bosnia and Herzegovina are not slight. Turkey and Russia are not the only countries to oppose it. Herzegovina was at one time attached to Montenegro, and the Montenegrins look upon it as their rightful possession. The rayas of the Bosnian valleys are of kindred blood with the Servians, and most of them speak the Serbian language. The dream of a Great Serbia is almost as dear to them as it is to the Serbian patriots. Austria is constantly increasing her influence in the South Slav principalities. Serbian politics are controlled from Vienna instead of from St. Petersburg, but the Austrian ascendancy has alienated the people from their ruler, who recently assumed the kingly title under Austrian auspices. The erection of their country into a kingdom is a step toward the accomplishment of the inextinguishable idea of a Great Serbia. Hatred of the arrogant Schwabs, as the German-speaking Austrians are called, is increasing in all the Slav principalities. Every convulsion among the Balkan populations sets Russia throbbing in sympathy. At the outbreak of the insurrection in the Herzegovina the same phenomena that preceded the Turkish war were noticed; but, as they did not reach the dangerous stage of an open participation of Russians in the rebellion, the war-cloud passed over. Count Kalnoky, who is at the head of the Austrian Foreign Office, is confident that the conflicting interests of the two empires can be peaceably reconciled. Signs of Pan-Slavic activity were detected among the Ruthenians in May. A whole village had gone over from the Roman Catholic to the Greek Orthodox faith. The discovery of papers showing a systematic religious and political propagandism led to the arrest of eleven Ruthenians, who were brought to trial for high treason. Austria and Germany shape their foreign policy in common, and speak with one voice in the councils of Europe. The German allies have constituted themselves the guardians of the peace of Europe, and use their powerful influence to arrest any cause of disturbance. One of the periodical meetings of the two Emperors took place at Ischl in August.

The question of returning the friendly visit of King Humbert was a state problem of some difficulty. The Emperor Francis Joseph would not visit Rome without paying his reverence to the Pope, which might bring him, the Italian King and his people, and all the courts of Europe, face to face with the papal question, which perhaps he would not have been loath to bring up. The Italian Government was unwilling to risk the consequences. For the King to capitulate his capital to the Pope and appoint a rendezvous outside would have been ignominious. Count Kalnoky announced that he could not recommend Rome, and the correspondence broke off without umbrage, but with the position of the Pope decidedly strengthened as the result of Francis Joseph's pious fidelity.

At the celebration of the five-hundredth anniversary of the union of Trieste with Austria, and at the subsequent visit of the Emperor on September 17th, Irredentism manifested itself not merely in inflammatory proclamations but in villainous plots. A grenade was thrown into a procession on the arrival of the Archduke Karl Ludwig, and on the coming of the Emperor an Austrian deserter, named Oberdank, was arrested with Orsini bombs in his possession. The inhabitants of Trieste are thoroughly loyal to Austria. They have reason to rejoice that their city is Austrian, for it would be only one of several Italian ports on the Adriatic, while now it has the monopoly of the Austrian Mediterranean trade and a large share of the southern and eastern trade of Germany.

**POLITICAL SITUATION.**—The transformation of the empire from a centralized state to a federal union has proceeded far enough to show that the cohesive principle will not be lost. The minor nationalities, having tasted the sweets of political liberty, are more urgent, and the Germans cling less tenaciously to the power which is slipping out of their hands. How far the traditions of German order and thoroughness will be preserved in the new centers of power under popular government, which is inevitable, is the subject of national misgivings. The Hungarians have won their liberty and managed their own affairs under a system of government which seems to satisfy the people. In imperial affairs their Parliament has an equal voice with the Reichsrath. The two Delegations, or committees from the two bodies, must agree upon the appropriations, although Hungary contributes but thirty per cent of the amount. The political ferment is confined to Cisleithania. It takes the singular form of a war of languages, and an agitation for the political equality of the different races. Of individual equality very little is said, although Austria is the last country in Europe in which the basis of political representation is feudalistic. Universal suffrage is the only possible basis of equality of the races; so that the subjects of the Austrian crown re-

ceive the extension of the franchise not as a direct aim, but as a means of asserting their suppressed nationalities. The Emperor congratulates himself that revolutionary aspirations have not been awakened in his dominions, and that Nihilistic violence is unknown. The people are absorbed in their various national aspirations. Decentralization has acquired an irresistible impetus. The danger of a Russian war, and the German alliance, strengthen the throne and the German party, and preserve for the present the old bond. Magyars, Poles, and Germans are united against Russian aggression. The Government have favored the Ruthenians and other minor Slav nationalities which might waver in their allegiance. Liberty and federalism are seen to be the means of the empire's salvation. The Emperor draws out a sentimental attachment, while he is paying especial court to the nationalities; but when a federal system has been established the office of the throne will in a great measure disappear. The German bureaucracy, while the control over the Austrian populations is passing away from them, seek to perpetuate their mission by taking the Slavs of the Balkans in hand. But their methods have signally failed thus far with the fierce lovers of liberty who live in primeval Slavic unrestraint on the Bosnian highlands. If Austria could extend her sway by old-time rigor and repression, Hungary is unwilling to have the dual monarchy converted into a Slavic empire under German rule. The question of the definitive annexation of Bosnia and Herzegovina has not yet come to a final solution. The difference of view between the two co-ordinate Governments is almost as great an obstacle as the external difficulties. The Magyars are unwilling to sacrifice the principle of the dualistic Constitution to the extent of administering Bosnia perpetually as a dependency of the empire, and equally unwilling to have it attached to the Austrian crown. The only solution they deem equitable would be to incorporate it with the Hungarian dominions, but they would be unprepared to accept the gift with the attendant costs and responsibilities.

An attempt to organize a party on genuine liberal principles was attempted during the year, but neither the German Liberals nor the Slavs of advanced opinions showed a disposition to forget the racial conflict which is the question of the hour. The new party grouped itself around Robert von Walterskirchen, a Styrian deputy, who seceded from the Constitutional party and was selected as an independent on account of his advanced opinions on electoral reform; and Dr. Fischhoff, a prominent Liberal of 1848, who has held himself aloof from politics on account of the compulsion exercised by his party upon the minor nationalities which led to its downfall. Now that the embittered Czechs and Poles, in alliance with the Clericals and the Feudalists, have



beaten the German Constitutional party out of the field, these new leaders propose to concede to the Czechs and the other races the right to perpetuate their languages and nationalities, retaining, to the extent that the public interests require, German as the official language of the Government. The paragraph in the Constitution securing this right to each race they would give full effect to by legislative enactments. If the Germans will accept the situation now, as they must in the end, and give up the ethnic contest, the liberal elements of all the nationalities can unite in the pursuit of constitutional liberties. The programme of this growing party, which has purged its mind of the idea that forcible Germanization is a prerequisite of constitutional freedom, is of an advanced democratic character: universal suffrage, with the entire abolition of the representation of special interests in the Reichsrath; complete liberty of the press and the right of assembly; positive reforms for the benefit of the working-classes.

The dominance of German, even as the official language in Bohemia, is endangered. The civil servants already use their native tongue inside the offices. Aroused by the intentions of the Centralists to use state education as a means for exterminating their national tongue, the Czechs did not rest after expelling German from the common schools, but insisted on the instruction in all the intermediate and technical schools being given in Bohemian, and now have their national university. The Slovians have imitated the Czechs, and are struggling for the preservation of all the characteristics of their insignificant nationality. Prince Czartoryski is endeavoring to unite all the Slavs in a revolt against Germanizing tendencies.

While Austria is experiencing a transfer of political powers, which is in nature though not in form a political revolution, Hungary is occupied with no question more important than finance. The harvest was abundant, and the Government was never in a more favorable position. Koloman Tisza, the able Prime Minister, is the absolute master of the country, and has no rival and no organized opposition to disturb him. The chief problem of the Government at present is the reform of the system of taxation. The people have suffered much, and sometimes they have been provoked into resistance and riot by the exactions of the tax-collectors. The system of taxation is all in confusion, so that the evils may be remedied without reducing the revenues.

**INSURRECTION IN CRIVOSIA AND HERZEGOVINA.**—By stubbornly ignoring the wants of the people, the Imperial Government has, in three years of harsh maladministration, civil and military, greatly increased the difficulty of amalgamating Bosnia and Herzegovina with the empire. Austria entered upon the mission of extending her rule into the Balkan lands with the approval of Europe. The more intel-

ligent spirits among the populations of the peninsula looked hopefully to the prosperous and enlightened empire for deliverance from Turkish misrule, and for guidance and government. The dual monarchy inaugurated its rule in the provinces confided to it by the mandate of Europe with a ruthless war against the sturdy, freedom-loving mountaineers, which cost \$90,000,000, one quarter of which sum, if expended in productive works, might have won the hearts of the impoverished people. The nominal sovereignty which the Porte insisted upon preserving at the Congress of Berlin has become more shadowy and problematic since the Sultan has turned his attention to consolidating the Ottoman power in Islamic lands. The Pan Slavonic agitation has dwindled away, and the dreaded influence of Russian machinations, and of the ruble on its travels, has practically ceased since the Russians have given their thoughts to home problems. Yet, after three years' trial of the civilizing efforts of the Austro-Hungarian Government, a universal cry was heard in the occupied provinces, from Christians and Mohammedans alike, that the yoke of the Austrian was more cruel and intolerable than that of the Turk; and the Herzegovinians in their desperation arose again in open rebellion. The Imperial Government entered upon its task financially hampered as usual, for in the united monarchy money can never be had for imperial purposes when it is needed. Only a small party approved of the occupation in the first place, and after the blundering war of occupation the Government announced that no further appropriations would be required from the Parliaments, as the revenues of the provinces would suffice for their administration.

The Bosniaks and Herzegovinians were taxed for their own repression more heavily than they had been taxed by the begs and pashas. All the Turkish taxes were continued, and a host of *octrois*, tolls, license and excise taxes were superimposed, with, finally, the salt and tobacco monopolies. The Turkish taxes were severe, but the administration was lax; and the tax-gatherers, when seasons were bad, acknowledged the will of Allah, and took only what the raya could bring. The Austrian officials, entering this land exhausted by wars and insurrections, its stock destroyed and its industry unhinged, exacted the last penny of the augmented taxes. The cattle of the peasantry were driven off, their household goods and seed-corn taken, and their houses sold to the highest bidder. The Greek Orthodox and Roman Catholic population suffered most from this unaccustomed stringency of the administration. Many of the ruined emigrated into Turkish dominions, and many became mountain robbers and cattle-thieves.

While draining away the capital and paralyzing the productive forces of the people to pay for military roads, which were of no practical use, because wagons and draught-animals

were unknown, and for the elaborate systems of civil officialism and military occupation, which were felt to be a twofold tyranny, the Austro-Hungarian Government did nothing to remove the peculiar grievance which had excited the Herzegovinian outbreak of 1875 that led to the Servian and Turkish wars, and furnished the ground of Count Andrássy's famous note of December 30, 1875, with which the diplomatic campaign against the Porte was inaugurated. The agrarian question was referred to a Bosnian commission, which simply revived an old Turkish law enabling the landlords to collect their rents by the aid of the military. The Mohammedan proprietors—the aristocracy of the country—were propitiated, lest their complaints to the Porte might interpose an obstacle to annexation. But the Christian agriculturists it was sought to assimilate by disciplining them in the rigorous regulations of Austrian officialism, and by the violent obtrusion of the German language and the Roman Catholic religion.

The vexatious over-government into which this wild and simple people were initiated, brought no compensating advantage over the loose and negligent *régime* of the Osmanli. Even the administration of justice, which, if capricious, was speedy and available in Turkish times, was now worse; for the people would not accept the elaborate procedure of the new courts.

In October, 1881, the law introducing universal military service in the occupied provinces was published. The recruiting was to commence in the March following. To conciliate the wealthy Mohammedans, the law was modified to permit the hiring of substitutes. The Porte raised no objections, asking only that the Mohammedan conscripts should not be employed in foreign operations, and might be permitted to wear the fez. To the Christians the conscription law was not less obnoxious than to the Mohammedans. It was felt to be the most oppressive measure to which they had yet been subjected, for under Ottoman rule the Christians had been entirely exempt from military duty, paying instead a capitation tax of about a dollar yearly.

There was every prospect that the people of the occupied provinces would resist vigorously the enforcement of the conscription law. The difficulty was complicated by the circumstance that compulsory military service had never been fully introduced in Dalmatia. The Crivoscians were exempted from military duty, as well as from taxes, tithes, and other public burdens, by a solemn charter repeatedly renewed. When the Government, in the reorganization of the military system of the empire, attempted to annul this privilege, a portion of the Dalmatians submitted to the conscription, but the Crivoscians rose in arms, destroyed a detachment at Fort Dragalj, and routed General Auersperg's army. His successor, Rodich, submitted to their terms, agreeing not only to

their immunity from military service, but granting them an indemnity of forty florins per head. After their ancient privileges were thus reaffirmed by the treaty which was struck at Kneslac in February, 1870, no attempt was made to impose the conscription laws upon the South Dalmatians until it was thought necessary to subject them to the system of universal military service before applying it to their kindred in Herzegovina.\*

Preparatory to the introduction of this disciplinary means of civilization in the occupied provinces, General Rodich, then Governor of Dalmatia, was instructed in 1880 to carry out the militia law in the district of Cattaro. He professed himself able to execute the law, but asked time to prepare the people. Nothing was accomplished that year nor the next; yet when summoned to Vienna, just before the issuance of the order for the occupied provinces, he still declared that his moral influence would be sufficient. A meeting of the Crivoscie people at Risano had previously declared that they would only comply with the law on certain conditions, which were rejected at Vienna.

Relying on the assurances of General Rodich, the military law for Bosnia was published October 24th. Before the Delegations separated, the people of the Crivoscie rose in revolt against the conscription. The insurrection spread from the Bocche di Cattaro into the adjacent part of Southern Herzegovina. It was re-enforced and controlled from the beginning by Herzegovinian malcontents, who hastened through Montenegro to the scene of disturbance, and by Montenegrin allies, headed by experienced guerrilla chiefs. Support and encouragement were received from a party of the Montenegrians and of the Servians, and from professional agitators of the Panславist cause. Although the Austro-Hungarian Government gave out that it had to do only with the forays of robber bands, military precautions were taken betimes. Rifle battalions were sent into the Crivoscie. A cordon was drawn around the insurrectionary center. The Prince of Montenegro took what slight measures he could to prevent re-enforcements from reaching the insurgents. He stationed a guard along the border, and the Austrians formed a second cordon, but both were insufficient to keep out the guerrilla bands, coming by secret trails through the mountains.

The district of Crivoscie is hardly sixteen square miles in extent, and contains but fifteen villages, with 1,600 inhabitants. The recusant conscripts are a tall, handsome, muscular race

\* When Dalmatia was incorporated into the Austrian dominions, after the Peace of Campo Formio in 1797, the inhabitants fought for the preservation of their ancient privilege of immunity from military service. This right, which they had enjoyed under the Venetian dominion ever since their subjugation in 1420, was formally conceded, and in 1814 reaffirmed. They have fought in the wars of Austria as volunteers—for example, in the war with France and Italy in 1859, when the Bocchese furnished a body of 2,800 men; but, for seventy years, their exemption from compulsory levies was duly respected by the Austrian Government.



of men. They have never been subdued, and know no law or discipline. Their raids into the neighboring Turkish territory have earned them the epithet of "Sheep-stealers." The difficulties of a military expedition in their district and in the adjacent parts of Herzegovina are incredible. The conformation of the land is the same as in Montenegro. An army must advance in the intricate mountain-paths, often in single file, and throw a bridge across every one of the numberless torrents. They must transport on pack-animals their ammunition, their cannon in separable parts, all their food and provender, and even their drinking-water. In the occupied territory 1,830 kilometres of roads were built in three years; but in the Crivoscie there are no means of communication but the difficult bridle-paths. The agile mountaineers have no need of paths, but can shoot down upon the toiling column from every cliff, and disappear without a trace. They can beset them anywhere on the flank or in the rear, or drive away the flock which is destined for the soldiers' meals. In military operations in such a country it is necessary to fortify and garrison every point of importance, every bridge that is built, every source of supplies. For this purpose the *kulas*, or block-houses, which are scattered through the country are of importance. They are built of rough stones, with towers pierced with slits for rifles. In peace-time they furnish nightly shelter to the patrolling gendarmes. The *hans*, or way-side inns, serve as gathering-places for insurgents, and the landlords are their zealous spies.

The district of Cattaro furnished its recruits in obedience to the order of October 24, 1881. The inhabitants of the Crivoscie only opposed a passive resistance, and when the commune of Ubl was preparing to send its quota the other Crivoscians drove its cattle up into the mountains as security for its fidelity. Detachments of riflemen were sent into the district. On the approach of the soldiery, several hundred men collected in bands. They were armed with Martini rifles. Raids were made on the neighboring districts. Skirmishes with the troops commenced in December. Some of the corpses of the fallen were found with the ears and noses cut off, a form of mutilation customary with these savage mountaineers. Their threat to put to the sword every captive soldier of Bocchese birth was not carried into effect.

By January all Herzegovina east of the Narenta was aroused, up to the southeast Bosnian border. The insurgents concentrated with strategic sagacity at a point near Fotcha, which commanded the communication between Serajevo and the Austrian forces on the Drina; in the vicinity of Konjica, on the lower Narenta, a point which commands the only military road leading from Bosnia into Herzegovina; and near Korito on the Montenegrin frontier. The

isolation of the Crivoscie by a military cordon had proved a complete failure.

With the spread of the insurrection into Herzegovina the Austrian Government was confronted with the danger of a European war. A military credit was voted by the Delegations. The command of the operations for the suppression of the insurrection was given to the young and energetic Lieutenant-Field-Marshal Jovanovics. The number of the insurgents was variously estimated at from five to fifteen thousand. They were armed throughout with breech-loaders. The heated language of General Skobeleff and several Russian statesmen, the collection of money and war material by native and foreign Slavic agitators, the activities of the Young Servian League of the Omladina, and the direct aid in munitions and supplies given by the inhabitants of Montenegro, furnished the elements for another conflagration in the Balkan Peninsula.

The insurgents presented in the beginning of February an irregular line from Trebinje through Liubnje, Bilek, and Gatzko to Nevesinje, and



through the wild mountains of Zagorje, where they concentrated in the greatest force, to Fotcha, and beyond as far as Cainitcha. Behind the way of escape into Montenegro or the Sanjak of Novi-Bazar was open. Over a thousand of them, under Dandalitch and Sekanovitch, held the advanced post in the valley of the Zeljeznika, an affluent of the Drina, south of Serajevo. In Fotcha and the Zagorje the Sirdar Tungus commanded; in Nevesinje, Gatzko, and Bilek the redoubted brigand Stojan Kovatzevitch; in Zubzie, near Korito, Tripko Fukalovitch; around Trebinje, Tomasevitch; and in the Crivoscie, Militch and Sutitch. They had a fully equipped mountain battery, and pursued systematic plans under the direction of some

unknown strategists. In fight they gathered sometimes eighteen hundred strong. In the intervals between their attacks they were hidden in scattered bands in the gorges of the mountains.

General Jovanovics had a force of 40,000 men with 56 mountain-guns, composed of the garrisons of the coast-lands and several regiments sent on to the seat of war. They were formed into so-called mountain brigades. The signal service, sanitary arrangements, and commissariat were admirably organized. Jovanovics assumed the command of the forces in Herzegovina and the Crivoscie on the 6th of February. In Herzegovina his authority was unfortunately divided with General von Dahlen, the civil and military governor of the occupied provinces. The insurgents proposed peace at once to the new general; but he rejected their stipulations for universal amnesty. He proposed to wait for open weather, organize his army for the difficult service for which it was none too large, and drill the troops in rifle practice. But General von Dahlen urged an immediate advance, and on the 9th of February the forward movement began from Mostar, where General Jovanovics had established his headquarters. On the same day Risano, the chief town of the Crivoscie, was captured by the help of the fleet in the Bocche; and Ledenice, the center of the insurrection in the Crivoscie, was taken by storm. The insurgents were thus at the start cut off from all aid coming by sea, and separated from the southern coast district, the Primorje. Nevertheless, they boldly took the offensive, and on the 10th and the following days struck at Fotcha, an important central position, and at Tirnova, and attacked the fortified height of Rogai. Their object was to spread the insurrection into the interior of Bosnia. They were repulsed, and on the 14th the ridge of Zimje Polje, east of Mostar, was occupied, and its commanding points fortified. After these first successes the movement of the Austrian troops was slow and difficult. There were no communications between the different columns. Each pressed forward on a converging line toward the center of the insurrection. Their object was to get between the insurgents and the frontier. Until they could be cut off from Montenegro, the enemy were unapproachable. They could disappear when hard pressed, and reappear to attack the Austrians where they were weakest. Montenegro was impelled by the success of these tactics, and by the promise of the Austrian Government to bear the whole cost, to strengthen her boundary cordon, and place more trusty officers in command. There was no opportunity for strategic combinations. The Austrian lines had to contend sharply for every step of their progress. Bravery and perseverance were displayed by the troops, and quite as much discipline and fortitude were exhibited in the resistance of the insurgents. In the fights which took place almost daily the Austrian regulars were many times worsted.

The Austrian soldiers did not forget the strict discipline for which they are distinguished; but their commanders adopted stern and cruel measures for crushing out the rebellion. Their path was marked by smoking villages.

About the 20th of February the insurgents collected in great number in the plateau of Zagorje, a natural stronghold which they deemed impregnable, for the purpose of striking a blow at Serajevo. The Austrians advanced in four columns from different points, with the object of surrounding them. The access to the plateau is very arduous, and they were impeded by snow and storm. After several days of fighting, in which a number of positions were carried by assault, the Austrians occupied the plateau\* on the 25th. Yet they did not succeed in entrapping the enemy. The insurgents escaped on the right bank of the Drina toward the Montenegrin frontier. The Knez of Zagorje made his submission. The people of the district were famishing, and food was distributed by the authorities. Another column in a sharp assault carried the steep heights at Ulok, east of Mostar, and drove the insurgents over the Narenta. Worn out in daily battles, the insurgents of Herzegovina were gradually pressed back upon a strip of land skirting the Montenegrin frontier. In the Crivoscie the right wing of the Austrian army was not idle. After taking Bratlo and Ubli, the insurrection was confined to the wedge of land which projects into Montenegro. By the capture of Fort Dragalj, on the 10th of March, the last of the insurgents were driven over the border. The insurrection, as an organized military movement, was broken up. The Austrian soldiery held the land. Flying columns traversed the country, and met with little resistance. The inclement weather told severely on the Austrian troops, but their losses in battle were remarkably light, being only 53 dead, and 210 altogether.

On April 22d Freiherr von Dahlen issued a proclamation to the inhabitants of the occupied territory, announcing the final suppression of the insurrectionary movement, and inviting them to return to their homes. He promised amnesty to all but the leaders. The Austrian army had won the campaign, but it was a hollow victory. When they came into possession of the country it was a desert. They found only burned villages and deserted farmsteads. The inhabitants had emigrated in a mass to Montenegro with their families and their flocks and herds. From there they continued to return in bands to harass the troops. The Crivoscie was absolutely empty of inhabitants. The Montenegrin authorities arrested and disarmed the immigrants, but were at a loss what to do with them. At the instigation of the Austrians the Government cut off the rations which were supplied out of its limited means

\* This almost inaccessible stronghold the Turks did not attempt to assail in 1875, but contented themselves with a siege.



and tried to drive them back to their homes, but with indifferent success.

At the meeting of the Delegations in April, the Common Ministry asked for 23,730,000 florins to defray expenses in South Dalmatia and the occupied provinces until October, in addition to the military credit of 8,000,000 florins granted at the special meeting of the Delegations on January 28th. The Hungarian Delegation took this opportunity to overhaul the Bosnian policy of the Government. The Minister of Finance, Count Szlavy, explained that the conscription in Bosnia would be confined to recruiting 1,200 men, who would not be removed from the country, and was only intended to enforce the principle that it is the duty of the people to take part in the defense of their boundaries. The conscription is a direct infringement of the Treaty of Berlin. In the administration of this practically annexed territory the Austrian Government goes through the form of submitting every proclamation to the Porte. The Turkish minister revises and alters it, but it is always issued in the original shape. The Hungarian Delegation cut down the appropriation for fortifications and other items. Count Szlavy resigned in consequence. In the Hungarian Lower House the reduced appropriations were warmly contested. In the Upper House, Count Deseffy, who was for three years chief administrator of the district of Serajevo, unfolded all the mistakes and abuses of the Bosnian administration. Tisza, the Hungarian Premier, admitted that the Bosnian bureaucracy needed a thorough purification. In deference to the determined attitude of the Hungarian opposition, after Szlavy had continued his functions for nearly

a month, awaiting his successor, Baron Kallay, a Hungarian statesman, but a friend of the Slavs and believer in the Slavic extension of the empire, was appointed Common Minister of Finance. The post might be better described as the ministry for Bosnian affairs. The programme to be carried out was the reversal of the obnoxious German methods, and an administration according to Slavonic notions and customs. As an initial reform, a separate Civil Governor of Bosnia was appointed, the choice falling upon Count Rudolf Khevenhüller, who, like M. de Kallay, is familiar with the southern Slavs and their languages. The elaborate machinery of the law, which was introduced after European models, was first done away with, and the decision of cases made speedy and inexpensive. No lawyers nor briefs are necessary in petty suits, and in larger ones only one appeal may be heard.

INUNDATIONS IN TYROL.—Various parts of Europe were visited in 1882 by devastating floods. In the Alpine regions the abnormal rain-fall wrought the most destruction, and nowhere so great as in the valleys of Austrian Tyrol, where the losses exceeded 30,000,000 florins, or \$13,000,000. An inundation occurred in the middle of September, the effects of which were partly averted by the energy of the authorities. On the 28th of October the people were driven out of Bruneck, Toblach, Innichen, and the hapless Welsberg, by one of the most destructive floods that is recorded in history. The protective works were destroyed, towns almost annihilated, farms not only stripped of harvest and improvements, but left desolate under a layer of silt and boulders.

## B

BAPTISTS. I. REGULAR BAPTISTS IN THE UNITED STATES.—The following is a summary of the statistics of the Regular Baptist

churches in the United States, as they are given in the "American Baptist Year-Book" for 1882:

STATES AND TERRITORIES.	Associations.	Churches.	Ordained ministers.	Total members.	STATES AND TERRITORIES.	Associations.	Churches.	Ordained ministers.	Total members.
Alabama.....	71	1,751	1,014	167,650	Missouri.....	70	1,448	847	95,176
Arizona.....	1	1	1	14	Nebraska.....	11	136	68	4,808
Arkansas.....	50	1,149	655	54,805	Nevada.....	..	2	1	110
California.....	8	98	91	6,083	New Hampshire.....	6	81	87	8,915
Colorado.....	2	22	16	1,598	New Jersey.....	5	179	201	32,323
Connecticut.....	6	119	119	20,880	New Mexico.....	..	8	2	45
Dakota.....	1	21	18	781	New York.....	44	873	786	118,562
Delaware.....	..	11	13	1,991	North Carolina.....	78	1,905	1,060	192,658
District of Columbia.....	2	23	23	8,887	Ohio.....	81	619	470	49,114
Florida.....	19	894	216	28,126	Oregon.....	5	69	41	2,752
Georgia.....	121	2,896	1,732	238,975	Pennsylvania.....	28	555	455	62,877
Idaho.....	..	1	1	20	Rhode Island.....	3	62	85	10,662
Illinois.....	42	915	675	67,089	South Carolina.....	46	1,184	685	150,792
Indiana.....	80	584	826	42,489	Tennessee.....	52	1,331	846	110,877
Indian Territory.....	4	98	82	5,978	Texas.....	81	1,929	1,110	108,340
Iowa.....	27	411	217	24,264	Utah.....	..	1	1	16
Kansas.....	21	408	284	17,109	Vermont.....	7	115	72	9,614
Kentucky.....	71	1,678	978	162,423	Virginia.....	32	1,337	709	208,050
Louisiana.....	83	780	458	58,799	Washington.....	3	22	18	511
Maine.....	13	257	169	20,687	West Virginia.....	13	899	228	26,968
Maryland.....	1	45	42	8,755	Wisconsin.....	14	169	92	19,961
Massachusetts.....	14	291	346	48,994	Wyoming.....	..	2	2	101
Michigan.....	18	357	322	26,844					
Minnesota.....	9	159	71	6,985					
Mississippi.....	68	1,554	879	126,984	Total United States..	1,155	26,873	16,514	2,386,022

Whole number of Sunday-schools, 14,473, with 120,678 officers and teachers, and 1,006,412 scholars; number of additions by baptism during 1881, 81,570. Total amount of benevolent contributions, so far as reported, \$4,600,910. Number of theological institutions, 8, with 41 instructors, 447 students for the ministry, \$1,925,803 of property, and (in five institutions) \$1,320,649 of endowment funds; number of colleges and universities, 33, with 295 instructors, 4,690 students (of whom 784 were young women and 557 were studying for the ministry), \$8,085,950 of property, and \$3,698,619 of endowment funds; number of academies, seminaries, institutes, and female colleges, 53, with 390 instructors, 6,201 students (of whom 3,676 were young women, and 445 were studying for the ministry), \$2,500,780 of property, and (sixteen institutions) \$416,286 of endowment funds.

The statistics show an increase during the year of 25 associations, 313 churches, and 39,695 members, with a decrease of 82 ordained ministers and 21,154 baptisms.

The "Year-Book" gives the following general statistics of the Regular Baptists in all countries for 1881:

	Associa- tions.	Churches.	Ordained ministers.	Members.
North America (Includ- ing the United States).	1,179	27,213	17,106	2,429,118
South America (Brazil).	8	8	4	215
Europe.....	61	3,039	2,111	328,076
Asia.....	4	596	168	44,358
Africa.....	2	60	44	8,697
Australasia.....	4	143	95	7,918
Grand total.....	1,290	31,084	19,528	2,818,377

Total number of baptisms reported for the year, 118,927.

#### NORTHERN BAPTIST BENEVOLENT SOCIETIES.

—The anniversaries of the Northern Baptist Societies in the United States were held in the city of New York, beginning May 24th with the meeting of the *American Baptist Home Mission Society*. As this meeting marked the completion of the fiftieth year of the society's existence, the regular proceedings were supplemented by special jubilee services. The general receipts of the society for the year had been \$359,306, or \$124,273 more than the receipts of the previous year, which had been the largest recorded to that time in the history of the organization. A debt of \$29,955, which stood against the society at the beginning of the year, had been fully paid; and there now stood a balance in the treasury, available for the coming year's operations, of \$7,512. Seventy-five churches had been organized, 1,460 churches and out-stations supplied, and 1,675 members received by baptism, during the year. The mission churches returned a total membership of 21,181 and 819 Sunday-schools, with 38,575 attendants, and had contributed to benevolent funds the total sum of \$14,375. During the fifty years of its existence, the so-

ciety had issued 9,102 commissions to missionaries and teachers, through whose agency 2,838 churches had been organized and 87,056 persons had been baptized. Twelve educational institutions among the colored people in the South, or two more than were reported in the previous year, were receiving assistance from the treasury of the society. The new institutions were "Bishop Baptist College," at Marshall, Texas, and the "Kentucky Normal and Theological Institute," at Louisville, Ky. In all of these schools, 79 teachers were employed, and 2,151 pupils, 400 of whom were preparing to preach, were enrolled. The sum of \$39,964 had been paid for teachers' salaries, and the students had paid in \$22,331 for tuition, board, and room-rent. Dr. J. M. Gregory had been appointed superintendent of the society's educational work "among the colored people, the Indians, and others to whom it may be extended." Twelve missionaries, nine of whom were natives, were under appointment in the Indian Territory, and reported 896 members of the church and 1,148 persons in Sunday-schools. The Indian University at Tahlequah was attended by 69 students, four of whom were preparing for the ministry. Recommendations were made concerning the enlargement and more thorough equipment of this school, and for the sending of missionaries as soon as practicable among the Indians of Alaska. The Chinese mission at Portland, Oregon, with 50 members, had contributed \$85 to the jubilee fund of the society. The missionary work in Mexico, resumed a year before, was carried on by the Mexican Missionary Society in co-operation with this body. A general missionary was supported in this work, and another missionary had been commissioned. The 8 churches returned 156 members. Forty-six missionaries were employed in co-operation with the Eastern and Western German Baptist Conferences, among the German population. The missionary work among the Scandinavian settlers had resulted in the building up of about 120 churches, with 6,500 communicants. A Scandinavian department was connected with the Theological Seminary at Chicago.

The *American Baptist Publication Society* had received during the year \$345,632 in the business department, and \$107,784 in the missionary department. It had issued twenty-nine new publications and 308,000 copies of all publications; had expended \$3,517 in grants of Bibles and Testaments; and had employed 81 missionary colporteurs and 35 Sunday-school missionaries, through whose agency 13 churches had been constituted, 422 Sunday-schools organized, and 433 persons baptized. A resolution was adopted, requesting the Boards of the American Baptist Publication Society, the American Baptist Missionary Union, the American and Foreign Bible Society, the Southern Baptist Convention, and the three Baptist Conventions of the Dominion



of Canada, to appoint committees of conference on the best method of uniting Baptist Bible-work in America. The object of the committee was specified to be to submit a plan for the readjustment of the Baptist Bible-work, covering both translation and circulation, and to designate the methods by which it can be done efficiently and to the satisfaction of the denomination as a whole.

The total receipts of the *American Baptist Missionary Union* for the year had been \$352,787, of which sum \$157,989 were from donations, \$54,462 from legacies, and \$59,102 from the Women's Societies. The total expenditures had been \$353,183, leaving a balance against the treasury of \$396. The report on Bible-work recorded the progress that had been made in the publication or translation of the Bible in the Karen, Garos, Shan, Japanese, Telooqoo, and German languages. The following is a summary of the condition of the several missions of the Union:

ASIATIC MISSIONS.	Missionaries.	Native preachers.	Churches.	Members.
Burmah .....	96	488	471	28,488
Assam .....	17	87	29	1,765
Teloogoo, India .....	29	94	89	18,992
Chinese (including Bangkok, in Siam) .....	25	84	40	1,582
Japan .....	13	10	8	185
Total .....	181	663	587	46,017

Of the native preachers, 190 (126 in Burmah, 9 in Assam, 46 in India, 7 Chinese, and 2 in Japan) were ordained, and 473 (362 in Burmah, 28 in Assam, 48 in India, 27 Chinese, and 8 in Japan) were unordained.

EUROPEAN MISSIONS.	Missionaries.	Native preachers.	Churches.	Members.
Sweden .....	....	160	815	19,920
Germany .....	....	350	146	28,088
France .....	....	18	9	738
Spain .....	....	4	8	150
Greece .....	....	8	1	7
Total .....	....	535	474	48,862
Total for the whole work .....	181	1,198	1,061	94,879

A resolution was adopted accepting the invitation which had been made by the Publication Society to appoint a committee to confer with similar committees of other Baptist societies in reference to a readjustment of their Bible-work.

The *American Baptist Historical Society* reported its year's receipts to have been \$224, and its expenditures \$157.

The regular receipts of the *American and Foreign Bible Society* for the year preceding its last anniversary were \$11,028, and its expenditures \$7,007. The society had, furthermore, received the sum of \$2,000 in bonds and 413 acres of land in Illinois.

The receipts of the *Woman's Baptist Foreign Missionary Society* were returned at \$56,132, and its expenditures at \$55,819. Thirty-eight

missionaries and 49 Bible-women had been employed during the year, and aid had been given to 84 schools, in which were reported 2,170 pupils and 175 baptisms. The *Woman's Foreign Missionary Society of the West* had received and expended \$23,578. Two additional missionaries had been sent out.

**SOUTHERN BAPTIST CONVENTION.**—The *Southern Baptist Convention* met at Greenville, S. C., May 10th. The Rev. P. H. Mell, D. D., of Georgia, was chosen president. The Home-Mission Board had received \$28,370; adding to this the funds reported by the several State Home-Mission Boards as having been received and expended by them, the total sum of \$94,273 was shown to have been contributed by the Southern Baptist churches for the purposes of this work. The operations of the board were conducted at various points in the Southern States otherwise not provided with Baptist churches, among the Indians, and among the Chinese in California. The buildings of the Levering Manual Labor School, in the Creek Nation, had been completed, furnished, and paid for during the year. The cost of the school had been \$10,340, and it had an assured annual income of \$8,400. It was attended by 120 pupils. Four missionaries had been employed among the Chinese in San Francisco, California, and had the charge of schools for Chinese boys. The Foreign Mission Board had received \$49,041, or \$5,000 more than during the previous year, with which all its expenses had been paid, and it was now out of debt. Its missions were in Italy, China, Africa (the Yoruba country), Brazil, and Mexico, and included in all 34 stations, at which 61 missionaries and native assistants were employed. The whole number of native members was 740, of whom 126 had been baptized during the year. Eight new missionaries had been sent out, and six candidates had applied for appointments. The English language was beginning to be taught in the Chinese mission-schools. The heathen converts were contributing nearly a dollar each for benevolent purposes, and the women in the African missions were sustaining a native missionary.

**BAPTIST AUTUMNAL CONFERENCE.**—A Baptist Autumnal Conference, on the plan of the autumnal conferences held by the English Baptist and Congregational bodies, was held in Brooklyn, N. Y., November 14th, 15th, and 16th. It was the first meeting of the kind attempted by Baptists in the United States, and was called as an experiment. The Rev. George Dana Boardman, D. D., of Philadelphia, presided. Papers were read and discussed on "Skeptical Drifts in Modern Thought" (Rev. L. Moss, D. D., and Rev. E. H. Johnson, D. D.); "The Economics of Foreign Missionary Effort" (Rev. George E. Merrill and President A. H. Strong, D. D.); "The Church and the Children" (Rev. A. J. Sage, D. D., Rev. John Humpstone, Professor A. E. Waffle, and others); "The Labor Question" (A. J. Fox); "Charities" (Rev. J. M. Gregory, LL. D., and Hon.

Francis Wayland, LL. D.); "Race and Religion on the American Continent" (J. M. Hoyt, LL. D., President E. G. Robinson, and Hon. George Williams); "Diversity of Opinion within the Limits of Denominational Unity" (Rev. W. C. Wilkinson, D. D., on diversity of opinion on questions of Church polity, and Rev. C. B. Crane, D. D., on diversities of doctrinal views); "The Taxation of Church Property" (Hon. George H. Andrews and others); "Modern Evangelism" (Rev. A. J. Gordon, D. D.); and "The Meditative Element in Christian Life" (President H. G. Weston and others). It was determined to hold another conference in the autumn of 1883, at Boston.

II. SEVENTH-DAY BAPTIST CHURCH.—The following is a summary of the statistics of this Church as they were reported to the General Conference of 1882:

Eastern Association (16 churches in Rhode Island, Connecticut, New York city, and New Jersey).....	2,216 members.
Central Association (15 churches in Central New York).....	1,661 "
Western Association (30 churches in Western New York and Pennsylvania).....	1,981 "
Northwestern Association (34 churches in Ohio, Illinois, Wisconsin, Iowa, Minnesota, Kansas, Missouri, Kentucky, Nebraska, and Dakota).....	2,230 "
Southeastern Association (6 churches in West Virginia).....	648 "
Foreign (2 churches in England, 1 in Holland, and 1 in China).....	50 "
Total.....	8,781 "

Net increase of members during the year, 155. The whole number of Sabbath-schools was 93, with 6,211 scholars, or 810 more scholars than were reported in the previous year.

The receipts of the *American Sabbath Tract Society* for the year ending August 31, 1882, were \$8,294, and its expenditures were \$8,085. The society returned a balance of \$2,379 of assets over liabilities. It had employed agents in Pennsylvania, Haarlem (Holland), where a monthly journal was published on its account, and in Norway and Hamburg, Germany, where 7,916 tracts had been distributed; and it had organized a system of work by tent-meetings, to be held at different places in the United States. It published a general religious newspaper, a Sabbath-school journal, and a monthly journal designed especially to present the views of the denomination to the public, and which has been sent to clergymen, Sunday-school workers, and public reading-rooms throughout the United States and Canada.

The funds of the *Seventh-Day Baptist Education Society* were reported at its annual meeting, September 22d, to be in amount \$44,004. Reports were presented at the meeting of the condition of Milton College, Milton, Wis., and Alfred University, Alfred Center, N. Y. The former institution returned an income of \$8,067, a faculty of nine members, and 241 students. Ten thousand dollars had been added during the year to the endowment fund of the college. Alfred University returned an income of \$8,783, a general faculty

of thirteen, with a theological faculty of five members, and 378 students.

The receipts of the *Seventh-Day Baptist Missionary Society*, for the year ending September 21st, were \$9,330. The society sustained both home and foreign missions. Twenty-three home missionaries were employed in eleven States, and reported the organization of three churches, fifty additions by baptism, and a total of 858 church-members and 575 persons in Bible-schools. The foreign mission at Shanghai, China, was conducted by three American missionaries, with two native preachers, one Bible-woman, and three teachers of day-schools, and returned 40 pupils in the Bible-school and 52 pupils in three day-schools. A missionary was employed at Haarlem and Workum, in Holland, where were returned twenty-five church-members.

The sixty-eighth annual session of the *Seventh-Day Baptist General Conference* was held at Hopkinton, R. I., beginning September 20th. Professor A. R. Crandall presided. A new church at Cartwright, Wis., was admitted to the conference. The increase in the number of members that had taken place during the year was reported to have been greater than the average annual increase of the previous five years. Progress toward the preparation of a denominational history was reported in the collection of material and in securing the preparation of original histories and memoirs. Professor William A. Rogers was elected president of the conference for the ensuing year.

III. THE BRETHREN, OR TUNKERS.—The differences of opinion which have prevailed and have been widening for several years among the Brethren, or Tunkers, have finally resulted in a definite schism; and the Church is now divided, in effect, into three branches, which are called the Old Order, the Conservatives, and the Progressives. The Old Order Brethren represent a local schism which occurred in 1881 in the Miami Valley, Ohio. They do not differ in doctrinal points from the Conservatives, but believe, as to points of practice, that the Church has erred "in encouraging protracted meetings, high-schools, Sunday-schools, and prayer-meetings, and in departing, to some extent, from the ancient order in dress and other matters, such as the use of musical instruments, etc." Their first meeting in 1882 was held in Brookville, O., and was attended by about six thousand persons, most of whom, it was remarked, were aged. The meeting made rulings against "fashionable mustaches," the parting of the hair on one side, the use of more than one color in house-painting, the wearing of silk and dress-trimmings by women, the raising of tobacco, and the selling of grain to be distilled.

The regular *Annual Meeting* of the Brethren was held near Milford Junction, Ind., in June, and was attended by ten or twelve thousand persons. The full privilege of voting was granted to the sisters. The most important



business of the meeting was the consideration of the case of H. R. Holsinger, one of the editors of the "Progressive Christian," who was charged with having published unwarrantable criticisms of certain customs observed by the Brotherhood, and with having caused divisions. The committee, to which the case had been referred by the previous Annual Meeting, reported recommending that Mr. Holsinger be expelled, and added to their recommendation a statement that the church at Berlin, Pa., of which the accused was a member, had refused to allow the trial which had been instituted against him to proceed secretly, as in the ordinary way, and had insisted on the presence of a short-hand writer to take a minute of the proceedings. Mr. Holsinger's friends made several efforts to bring him and the meeting into accord, but their offers were rejected, and the report of the committee was adopted by an overwhelming majority. A memorial was afterward presented from Mr. Holsinger's side asking that a committee, one half of whom should be Conservatives and one half Progressives, be appointed to prepare a plan for "a general reconciliation between the Annual Meeting and all the Brethren called Progressives," but the standing committee declared it could not entertain the proposition. The meeting ordered that all the decisions of the Annual Meeting should be mandatory instead of advisory; that any one who should "speak or write anything reproachfully against the Annual Meeting, or the practice, order, and usages of the Brethren," should be dealt with as an offender; that the Church papers should be consolidated, in order that the Brotherhood might hereafter have control of the press; and forbidding fellowship with the Progressives, recognition of them, or preaching in their churches.

This action was followed by a conference of the Progressive party, which adopted a preamble reciting that, "inasmuch as Christ gave his people a complete plan of salvation, containing neither too much nor too little; and inasmuch as no church, during all the history of the past, has successfully made additions to or subtractions from it through mandatory legislation without discord and trouble; and, inasmuch as reformations have universally tended to reaffirm the primitive doctrines of Christ, by divesting them of accumulated decrees, enactments, and laws made by church-leaders, which always tended toward abridging God-given liberty; and that church legislation has had a tendency in all ages to run into power, and the history of Christendom is full of examples of suffering and ostracism, as its legitimate offspring;" alleging that the spirit of intolerance had frequently been manifested in the Church in the expulsion of brethren and sisters "for no violation of gospel or moral principle," and had just been freshly illustrated by "what appears to us an act of injustice"; pointing to the fact that the Annual Conference was "almost wholly

taken up with legislation tending to abridge our liberties in the Gospel, enforcing customs and usages, and elevating them to an equality with the Gospel, and defending them with even more rigor than the commandments of God," and that the conscientious opposition of the Progressives to these proceedings had caused them to be styled "troublers" and "railers," and exposed them to reprobation; expressing sympathy and fellowship with all who had been expelled "without a violation of the gospel," and opposition to all tendencies toward intolerance and corruption of doctrines, and reaffirming the doctrines of the gospel as the only rule of faith and practice, and the doctrine of the Church "as it existed in its earlier and purer age, before it was corrupted by the additions made by elders and their abuse of power." A convention of all Brethren sharing in these views was called, to meet at Ashland, O., June 29th.

The convention was attended by between two and three hundred persons representing the progressive element in their several localities, and continued through two days. J. W. Beer was elected president. A preamble was adopted, in which were stated the grounds of complaint against the Annual Meeting, together with a declaration of principles reaffirming the doctrines of Alexander Mack, asserting that this convention represented the true, original Church of the Brethren, and setting forth provisions for the organization of conferences. Committees were appointed to publish the declaration; to confer with other branches of the Brotherhood; and to take the care of Sunday-school, educational, and missionary work. A subscription was taken up for Ashland College. Delegates were present at the conference representing a small body of a few hundred members, an offshoot from the Brotherhood, called the "Congregational Brethren," and another body, called the "Thurmanites," of Virginia, both of which proposed union with the Progressives. No definite action was taken on these propositions.

The position of the Progressives is thus defined by one of their journals, "The Gospel Preacher":

The Progressive believes in non-conformity, humility, and all the other attributes taught by the Conservative or Old Order Brother; but he renounces the decisions of men where there is doubtful gospel authority, he pleads for liberty of speech and of the press, advocates high-schools, Sunday-schools, prayer-meetings, and encourages the missionary work. Claiming that uniformity is not taught in the gospel, he opposes its being made a test of fellowship or official standing. He maintains that the world is advancing, and that, to keep pace with it, the Christian must choose all the good from the improvements and utilize them.

IV. MENNONITES.—The first General Conference of the *Evangelical Mennonites*, a branch formed within a few years by the union of two small bodies, was held in Indiana in September. Three conferences were represented by delegates. A course of reading for young ministers was prescribed. Resolutions were adopt-

ed making the term of the General Conference three years, and that of presiding elders one year; refusing fellowship to persons who take out insurance policies, who violate the Scripture rule of divorce as laid down in Matthew and Mark, and who use tobacco. The churches were prohibited having organs and choirs; and a system of raising funds for foreign mission work was adopted.

#### V. REGULAR BAPTISTS IN GREAT BRITAIN.

—The "American Baptist Year-Book" for 1882 gives the following statistics of the Regular Baptists in Great Britain and Ireland for 1881:

COUNTRIES.	Associa- tions.	Churches.	Ordained ministers.	Members.
England .....	88	1,893	1,360	203,304
Wales .....	9	594	344	67,859
Ireland .....	1	30	17	1,251
Scotland .....	1	88	79	9,284
Total .....	44	2,545	1,800	281,648

The "Baptist Hand-Book" for 1882 gives for the United Kingdom 2,586 churches, 3,395 chapels, 1,101,361 sittings, 295,035 members, 46,321 teachers and 433,801 scholars in Sunday-schools, 1,885 pastors in charge, and 3,247 evangelists.

The annual meeting of the *Baptist Union of Great Britain and Ireland* was held April 24th. The Rev. John Jenkyn Brown, of Birmingham, was president for the year. Returns had been received from 2,586 churches, with a reputed membership of 295,000, as against 2,565 churches and 281,000 members reported in the previous year. Nearly 50,000 sittings had been added to the chapel accommodation, giving 1,101,000 sittings, against 1,052,000 reported in the previous year, and school-rooms had been provided to accommodate 8,000 Sunday-school children. Chapel debts had been diminished by more than £124,000. Not less than £20,000 had been raised for evangelistic work in the several counties, including that of the British and Irish Baptist Home Mission. Some changes in the constitution were agreed upon, with the object of making it possible for the Union to become legally amalgamated with the British and Irish Baptist Home Mission. According to the new provisions, the governing body of the Union will consist of a council of one hundred members, seventy of whom are to be chosen by ballot, and the rest elected by the members thus chosen. The officers of the Union and of the Baptist Unions of Scotland and Wales will be *ex-officio* members of the council, and societies or organizations accepted by the Union as auxiliaries to any of its work will be empowered to appoint a representative who shall be entitled to attend and vote at the meetings of the council. The actuary of the annuity fund reported that an additional annual income of £400, or an augmentation of the capital to £100,000, was needed to keep the annuities at their present annual value of

£45 for each minister and £39 for each widow on the list. The committee was instructed to procure the opinion of counsel respecting the interpretation of the rule which deals with funds the investment of which has been specially prescribed by the donors. The *Baptist Building Fund* had aided with £25,000 in the erection of twenty-five new chapels and the enlargement of other chapels, by which a clear increase of 7,646 sittings was gained. The total cost of the new erections had been £83,770. The *Bible Translation Society* had expended £2,665 in the prosecution of its work, and had a small balance on hand. Progress was reported on the Bengali Commentary on the New Testament, in which Mr. Rouse had taken the place of the Rev. Dr. Wenger, deceased, and on the Dualla (African) version of the New Testament. The *Baptist and Irish Home Mission* had received £4,002; the *Zenana Mission*, £4,635.

The total income of the *Baptist Missionary Society* had been £52,366, and it closed its year with a deficiency of nearly £7,000. The receipts for special purposes (included in the total) had been £6,497. Encouraging progress was reported of the missionary work in India, the West Indies, and Africa. A special steam-launch was in course of construction for the Congo mission in Africa. In China, Mr. Richard had been preparing translations and original books for the *literati* in Shansi.

The annual report of the *Baptist Union of Scotland* for 1880-'81, which was read at the meeting of the Union in April, gave the number of churches in connection as 80, with 8,500 members. Sixty-seven Sunday-schools, with 905 teachers and 7,300 children, and 157 preaching-stations, were also reported. Forty-seven Bible-classes had been formed during the year, and were attended by 1,940 persons. One new chapel had been opened, and three others were being built.

VI. GENERAL BAPTISTS.—The one hundred and thirteenth annual meeting of the *General Baptist Association* was held at Derby in June, under the presidency of the Rev. William Gray, of Birchcliffe. Reports had been received from 168 out of 187 churches, which showed a clear gain of 442 members. The total expenditure for home missions for the year had been £483, and the committee returned a balance on hand of £401. The total receipts for foreign missions had been £8,116, of which sum £3,203 had been received in India, and £185 in Rome. The expenditures had been £8,947. The liabilities of the society had been increased by £279. The Building Fund Committee returned a capital, provided "all promises were fulfilled," of £5,500. Its receipts had been £1,557, and it had made grants to churches of £1,250.

VII. BAPTISTS OF GERMANY.—The twelfth Triennial Convention of the *Baptists of Germany* and other European countries was held in August in Altona. One hundred and thirty-



five delegates were present, representing 140 churches and 2,800 members, all the result of a mission which was begun under American auspices in 1834. The publishing business of the convention was represented as being in a flourishing condition. Six thousand dollars had been raised during the past three years for the theological school. The convention resolved to celebrate the semi-centennial anniversary of the mission in 1884, by establishing a fund for invalid preachers.

BARNARD, JOHN GROSS, born in Sheffield, Mass., May 19, 1815; died at Detroit, Mich., May 16, 1882. General Barnard received a good rudimentary education, and at the age of fourteen was admitted as a cadet in the United States Military Academy at West Point. After graduating he was brevetted second-lieutenant of the Corps of Engineers, and soon was sent to the Gulf coast, where, as assistant and principal engineer, he was engaged on the fortifications of Pensacola and New Orleans. He was also employed on various harbor improvements until the war with Mexico called him to active service. He superintended the construction of the defenses of Tampico, and surveyed the battle-fields about the city of Mexico. For his "meritorious conduct while serving in the enemy's country," he was brevetted major on May 30, 1848. Two years after he was appointed chief of a scientific commission to survey the Isthmus of Tehuantepec, with a view to the construction of a railroad across it. He was next employed in improving the mouths of the Mississippi River. He was superintendent of the United States Military Academy from 1855 to 1856, and then was in charge of the fortifications of New York Harbor.

At the outbreak of the war General Barnard served as chief-engineer of the Department of Washington from April to July, 1861, and then as chief-engineer to General McDowell in the first Bull Run campaign. Next, with the rank of brigadier-general, he acted as chief-engineer to the Army of the Potomac in the Virginia peninsular campaign of 1862. When the Confederate army invaded Eastern Virginia, he was appointed chief-engineer of the defenses of Washington, D. C. In January, 1864, he was appointed chief-engineer, and was on the staff of General Grant in the Richmond campaign. At the end of the war he was made brevet major-general, United States Army, "for gallant and meritorious services in the field," and soon promoted colonel in the Corps of Engineers. The President nominated him, on the death of General Totten, to succeed the latter as brigadier-general and chief of engineers in April, 1864; but, at General Barnard's request, the nomination was withdrawn before the Senate had taken any action on it. He was made a member of the Joint Board of Army and Navy Officers on Harbor Defenses, Torpedoes, etc., and served as senior member of the Board of Engineers for Per-

manent Fortifications, and also as a member of the United States Light-house Board. General Barnard was not only a brave soldier, but an eminent scientist and author. He wrote a number of valuable works, among which are: "Survey of the Isthmus of Tehuantepec," 1852; "Phenomena of the Gyroscope," 1858; "Dangers and Defenses of New York," 1859; "Notes on Sea-coast Defense," 1861; "The Confederate States of America and the Battle of Bull Run," 1862; "Reports of the Engineer and Artillery Operations of the Army of the Potomac," 1863; "Eulogy on General Totten," 1866; and many scientific and military memoirs and reports. The University of Alabama conferred on him the degree of A. M. in 1838, and in 1864 he was made LL. D. of Yale College. He was also a corporator of the National Academy of Sciences.

BEER. According to recent statistics, the total annual production of beer is, in round numbers, 3,675,000,000 gallons. The countries producing the greatest amount of beer are as follows:

COUNTRIES.	Gallons.	Per cent of the total production.
Great Britain .....	1,286,000,000	35.0
Germany .....	997,500,000	27.0
United States .....	898,750,000	11.0
Austro-Hungary .....	815,000,000	8.5
France .....	210,000,000	5.7
Belgium .....	196,900,000	5.0
Russia (in Europe) .....	105,000,000	2.8
Netherlands .....	52,500,000	1.4
Denmark .....	52,500,000	1.4
Sweden .....	39,000,000	1.0

The greatest amount of beer consumed per head of population is in Bavaria and Württemberg; then come England, Belgium, Saxony, Austria, United States. In Austro-Hungary the beer-tax amounted to \$10,000,000 in 1881, and in Germany to \$4,500,000.

A new beer-tax went into operation in Great Britain on October 1, 1880. While the tax was formerly imposed on the amount of the grain used, it is now estimated on the specific gravity of the unfermented beer, called wort, in such a manner that a tax of 6s. 3d. is imposed on every barrel of thirty-six gallons, of a specific gravity of 10.57. Heavier or lighter beers are to be taxed more or less *pro rata*. Besides this tax, every brewer must pay £1 per annum for a license. Brewers are permitted to use any materials they see fit. On beer which is exported the tax is remitted. The brewing for private use is not taxed, provided the annual rent of such private brewer, or its estimated value, does not exceed £15. Beer brewed under this condition can not be sold. The only charge put on a private brewer is an annual license-fee of 6s. The report for the first year of the new tax, from October 1, 1880, to September 30, 1881, showed that there were 17,110 brewers in the United Kingdom, who paid taxes to the amount of £8,498,044, 2s. 5d. It appeared from the re-

port that the large breweries which paid the highest taxes also paid much more in proportion than the smaller establishments. Another interesting fact was that the number of private brewers had increased beyond all expectation, the Chancellor of the Exchequer stating the amount received in fees from this source during the fiscal year, 1881 to 1882, at £46,000.

The total number of breweries on September 30, 1880, and the number doing business during the year 1880-'81, were as follows:

BREWERIES.	Number on Sept. 30, 1880.	Number during 1880-'81.
Breweries producing less than 1,000 barrels	16,770	14,948
“ 1,000 to 10,000 “	1,768	1,677
“ 10,000 “ 20,000 “	272	275
“ 20,000 “ 30,000 “	96	88
“ 30,000 “ 50,000 “	69	68
“ 50,000 “ 100,000 “	38	32
“ 100,000 “ 150,000 “	7	7
“ 150,000 “ 200,000 “	2	2
“ 200,000 “ 250,000 “	2	2
“ 250,000 “ 300,000 “	2	3
“ 300,000 “ 350,000 “	1	..
“ 350,000 “ 400,000 “	..	1
“ 400,000 “ 450,000 “	8	8
“ 450,000 “ 500,000 “	1	1
“ 500,000 “ 600,000 “	1	..
“ 600,000 “ 750,000 “	1	..
“ 750,000 “ 800,000 “	..	1
“ 800,000 “ 850,000 “	..	1
“ 850,000 “ 900,000 “	..	1
“ 900,000 “ 950,000 “	1	..
“ 950,000 “ 1,000,000 “	1	..
“ 1,000,000 “ 1,050,000 “	1	1
Beginners.....	2,183	..
Total .....	21,223	17,110

The general result of the new tax, according to these figures, seems to be a closing of the smaller breweries; for, if the 2,183 beginners of the year 1880 are added to those producing less than 1,000 barrels, a total of 18,953 results, which number was reduced to 14,948 in the first year under the new tax, showing a decrease of 4,005. The total amount of the beer-tax, inclusive of licenses, during the fiscal year ending March 31, 1882, was £8,500,000, while in the last fiscal year, under the old tax, which ended on March 31, 1880, the total beer-tax amounted to £7,727,000, showing a surplus of £853,000.

**BELGIUM.** The census of December 31, 1880, makes the total population of Belgium 5,519,844. The mean density of population is 187 inhabitants per square kilometre. The kingdom is divided into 41 administrative arrondissements and 2,583 communes. The population of the different provinces is as follows:

PROVINCES.	Population.	Per square kilometre.
Antwerp .....	577,282	204
Brabant .....	985,274	300
West Flanders .....	691,764	214
East Flanders .....	881,816	294
Hainault .....	977,562	262
Liège .....	664,606	230
Limburg .....	210,851	87
Luxemburg .....	209,118	47
Namur .....	322,620	83
Total .....	5,519,844	187

The population of Belgium at former censuses was 5,087,826 in 1870, 4,731,957 in 1860, 4,426,202 in 1850, and 4,073,162 in 1840. In 1870 the province of Antwerp had 492,482 inhabitants; Brabant, 879,814; West Flanders, 668,976; East Flanders, 837,726; Hainault, 897,006; Liège, 592,177; Limburg, 200,336; Luxemburg, 205,784; and Namur, 313,525. The population has increased most in the arrondissements of Charleroi (160 per cent), Brussels (91 per cent), Antwerp (89 per cent), Liège (82 per cent), Verviers (63 per cent), and Mons (49 per cent); it remained nearly stationary in those of Bruges, Furnes, Ypres, Courtrai, and Tournai, and diminished in those of Audenarde, Thielt, and Ath.

**AREA.**—The total area of the kingdom is 2,945,516 hectares, about 11,373 square miles. The number of agricultural holdings has increased from 5,720,976 in 1845 to 6,472,845 in 1880. Their average size is a little over an acre.

**OCCUPATIONS.**—The statistics of occupations show that 773,698 persons are employed in agricultural pursuits; 267,940 in the clothing trades, 185,658 in textile manufacture, 139,612 in domestic service, 131,311 in the building trades, 110,139 in food manufactures, and 83,363 in the coal and iron industry. There are 8,146 in the employment of the Government, 18,196 religious, and 50,804 landlords and capitalists. Of the population above the age of seven years, 58 per cent know how to read and write; above the age of thirty-five, the proportion is 49 per cent, and below the age of fourteen it is 72 per cent. In 1866, 32 per cent of the population was married. In 1840 there was one divorce to every 1,175 marriages; in 1865, one to every 739; and in 1880, one to every 182. The excess of births over deaths was 33 per cent in 1840, 28 per cent in 1865, and 39 per cent in 1880. The percentage of illegitimate births was 8 per cent in 1880, an increase of 2 per cent since 1840.

**CHAMBERS.**—The representation in the Chamber of Deputies was increased by six, and in the Senate by three seats, by a law introduced by the Government to give effect to the provisions of the Constitution requiring one deputy to be chosen to every 40,000 inhabitants, and half as many senators as there are deputies. The present numbers are 183 and 69. A new oath has been adopted in criminal procedure which runs as follows: “I swear before God and man to speak without hate or fear, and tell the whole truth and nothing but the truth.” Whoever declares that he has conscientious scruples against swearing can use the formula, “I solemnly promise to speak,” etc.

**POLITICAL QUESTIONS.**—Political activity in Belgium is confined to the protracted conflict over education, and the rights and status of the Roman Catholic clergy in the state. In the elections in June the Liberals gained a slight advantage, increasing their majority in the Lower Chamber from fourteen to sixteen, while



in the Senate they have a majority of seven instead of four. The latest programme of the Clerical party embraces among other points the abolition of the Ministry of Instruction, and the solution of the educational question by the introduction of the English voluntary system. The continual deficit in the public accounts will disappear with the contraction of the state school establishment. The Clericals propose, when they come into power, to extend the electoral franchise, and to secure the self-government of the provinces and the communes which is threatened under the Liberal *régime* of Frère Orban, the present President of the Council. The diplomatic relations with the Papal court would naturally be speedily resumed.

**LEGISLATION.**—Dissension arose among the Liberals over the question of the property qualification for suffrage, which is the payment of forty francs in taxes. The Clericals demanded a reassessment, which would increase the number of rural voters, which was accorded. A portion of the Liberal party proposed instead the amendment of the Constitution and the substitution of an educational test.

An extradition treaty has been concluded with the United States, in which for the first time in such an instrument the attempted assassination of a ruler is made an extraditable offense.

Saintelette, the Minister of Public Works, who retired in July, on account of his health, introduced the practice of employing women in the railroad, postal, and telegraph services. The innovation found many indignant opponents, but his successor, Olin, is determined to make it successful.

**FINANCES.**—The Chambers have authorized various loans, amounting in all to 209,015,124 francs, at three per cent interest. Rothschilds and Belgian banking-houses took 133,000,000 francs at 82 per cent of the par value. The budget for 1883 places the revenues at 300,153,390 francs, 3,505,681 francs more than the expenditures authorized for 1882; and the expenditures at 312,566,885 francs—that is, 12,413,495 francs more than the revenues. Among the items are 104,433,556 francs for public works, 88,805,919 francs for interest on the public debt, 44,727,300 francs for army and navy, 20,474,734 francs for public instruction, 16,051,411 francs for the administration of justice, 15,649,980 francs for the department of finances, 10,090,580 francs for internal administration, 3,496,900 francs for the gendarmery, and 2,335,830 francs for the foreign department.

BLANC, JEAN JOSEPH LOUIS, French statesman, historian, and socialistic theorist, died December 6th, at Cannes. He was born at Madrid, October 28, 1813. His father was financial overseer under King Joseph, his mother a Spanish lady of earnest temperament, belonging to the family of Pozzo di Borgo, whose

hostility to Napoleon she shared. The family were ruined in fortune by the Revolution of 1830. Louis was recalled from his studies to Paris and became a clerk in a lawyer's office. In 1832 he became tutor in a family residing in Arras. Returning to the capital in 1834, he entered upon a journalistic career, contributing to journals of radical tendencies, like "Le Bon Sens," the "Revue Républicaine," which was suppressed in 1835 by Thiers, and the "Nouvelle Minerve." He was editor of the first periodical from 1836 to 1838, and left it because the proprietors objected to his writing in favor of the nationalization of the railroads. He established "La Revue du Progrès," in which he advocated socialistic ideas, and proposed the organization of a league of democratic associations. He was waylaid by masked men, who beat him and left him for dead, shortly after the appearance of an article in praise of Bonapartist liberalism. It was popularly believed that the police were concerned in the outrage. The notion that he was a martyr for his opinions greatly extended the influence of Louis Blanc, whose admirable style and originality of thought had already won him many readers. After his recovery he wrote his essays on "The Organization of Labor." In these not only the doctrines of French communism were unfolded in a more convincing and captivating form than previously, but a practical scheme for their accomplishment was presented which has remained to this day the goal of French socialism. They were issued in book form in 1841, in which year was published also the "History of Ten Years," a work which greatly added to his literary reputation and raised him to the position of a popular leader of the revolutionary movement against the monarchy of July. This political tract, which summed up the sins of the reign of Louis Philippe and the hopes of the French democracy, helped to precipitate the Revolution of 1848. When the revolution came, Louis Blanc, who was looked upon by the working-men as their prophet, was made a member of the Provisional Government. He secured the adoption of a law abolishing the death-penalty for political offenses, but when he enunciated some of his revolutionary projects they were received so coldly that he resigned, but resumed his position in the Provisional Government when the opportunity of carrying out the experiment of the organization of labor was offered him as a bait to the masses who were ripe for a social revolution. He called together the Labor Commission, of which he was appointed president, in the Luxembourg Palace, and invited before it masters and laborers. When the working-men of Paris saw the delusive character of the revolution, they called upon Louis Blanc to assume the dictatorship. By declining, he lost his power over them. He was elected a member of the National Assembly. He brought forward the law repealing the sentence of exile against the Bonaparte family. After the Po-

land demonstration he was accused of plotting it, and after the June insurrection the charge was revived, and the Assembly voted to proscribe him. He fled to England, where he lived in exile until 1870. He corresponded with French newspapers, and continued his "History of the French Revolution," the first volumes of which had appeared before the February Revolution, during his long banishment. In 1865 he married Christina Groh, an accomplished Englishwoman. His "Letters on England" were collected and published. He wrote "Historical Revelations" to correct Lord Normanby's account of the Revolution of 1848. After his return to France, Louis Blanc was no longer the extremist who proposed to reform society in 1848. He was elected a member of the National Assembly in February, 1871. The socialists looked to him for a leader, but when he became a follower of Thiers his political influence was gone, but not the reverence with which the radicals regarded their teacher.

Louis Blanc was an unimpressive orator, being a small man of juvenile appearance and a thin voice. In conversation he was entertaining, and mild and agreeable in manners. It is reported that when his attempted assassination occurred, on August 15, 1839, his younger brother, who became distinguished as an art critic (see OBITUARIES), had a vivid presentiment of the scene, an incident on which Dumas founded the play of "The Corsican Brothers."

**BORNEO, NORTH.** Borneo, the largest island in the world after Australia, is one of the Malay Archipelago, and lies under the equator, with the 114th meridian of eastern longitude passing through its center. The northeast corner of the island, a tract about 18,000 square miles in area, with a coast-line of about 500 miles, and containing two natural harbors equal to any in the world, has been brought practically under the dominion of the British crown by the intermediation of a commercial company called the British North Borneo Company.

Spain has long laid claim to the sovereignty of this portion of Borneo, together with the islands of the Sooloo Archipelago. In 1836 the Sultan of Sooloo made his submission to the Spanish crown by a treaty. By another act, signed in 1851, he acknowledged all his territories to be integral parts of the Spanish dominions. In 1849 Sir James Brooke attempted to conclude a treaty with the Sultan, but in deference to the Spanish protests it was never ratified. In 1870 the Sultan of Sooloo rebelled, and a desultory war was carried on until 1877, during which Spain declared a blockade and stopped some German and British vessels. A diplomatic dispute ensued, which ended in the signature of a protocol waiving the right to obstruct commerce. The mooted question of sovereignty was purposely left unmentioned. In 1878 Spain reduced the rebellious vassal,

and exacted a new declaration of allegiance, recognizing her sovereignty over the Sooloo Archipelago and its dependencies. This time the British Government saw fit to enter a protest against the Spanish protectorate.

In the mean time, while the Sultan of Sooloo was in rebellion against his sovereign, Baron Overbeck, an Austrian, with financial means provided by Alfred Dent, a tea-merchant of Shanghai, had obtained from this potentate and the Sultan of Brunei a formal cession of sovereign and proprietary rights over all North Borneo. The agent of the adventurous British merchant had first bought out an American company which held a commercial concession from the Sultan of Brunei. He then acquired from the latter all his rights in the territory for the sum of \$5,000. The ruler *de facto*, and, in virtue of grants from the Sultan of Brunei, *de jure*, was the Sultan of Sooloo. Overbeck went to him and received, six months before he capitulated to the Spaniards, the cession of all his domains in Borneo, in consideration of an annual payment of a few thousand dollars. The bestowal of exclusive privileges would be in violation of treaty rights secured to citizens of the United States. Accordingly, the Sultan of Brunei was called to account by the American Government, and replied that Dent and Overbeck's cession was subject to the treaty stipulations.

Dent applied to the British Government for a charter of incorporation in 1878. Lord Salisbury, in objecting to the assertion of sovereign rights in North Borneo by Spain, disclaimed any intention to establish British rule in Borneo. The Government of the Netherlands protested against the adoption of the acts of the company by the British Government, because a good portion of the territory lay within the boundaries of the Dutch dominions, and because a treaty, made in 1824, precluded England from assuming sovereign powers in these regions.

The charter was granted by the succeeding Government in November, 1881. By the terms of the charter the company can not transfer the benefits of their grants without the sanction of the British Government. They are bound to discourage and, if practicable, abolish by degrees the institution of slavery. The appointment of the chief officer of the company in the island is made subject to the approval of the crown authorities. The cultivation and sale of opium are subjected to certain limitations.

The authority transferred by the two Sultans to Dent and his associate, and vested by them in the joint-stock company, is of the most absolute and unlimited character. They were constituted the rulers of these wide domains, and proprietors of the soil, with the power of life and death over the 150,000 inhabitants, the rights to coin money, to levy an army, and to impose taxes and customs. They possess these sovereign rights under the titles of Maharajah of Sabah, or North Borneo, Rajah of Gaya



and Sandakan, and Datu Bandahara. The treaty gives them authority to acquire, by purchase or other means, other lands besides those ceded.

The company took formal possession of the territory soon after receiving the grants in 1877. A deputy of each of the Sultans accompanied the representative of the association on a voyage around the coast. In each of the six places at which they landed the chiefs and people were called together to listen to a proclamation announcing the grant, and enjoining them to obey the new authorities. The company established factories at several points on the coast. The results of the new rule were salutary. Trade and production were stimulated, and piracy decreased rapidly.

**BRAZIL (IMPERIO DO BRAZIL).** (For details relating to area, territorial divisions, population, etc., reference may be made to the "Annual Cyclopædia" for 1878.)

The Emperor is Dom Pedro II, born December 2, 1825; proclaimed April 7, 1831; regency until July 23, 1840; crowned July 18, 1841; married September 4, 1843, to Theresa Christina Maria, daughter of the late King Francis I of the Two Sicilies.

The Cabinet in 1882 was composed of the following Ministers: President of the Council and Minister of Finance, Councilor A. S. C. Martinho; Interior, Councilor R. E. S. Dantas; Justice, Councilor M. S. Mafra; Foreign Affairs, Councilor F. F. De Sa; Navy, Councilor A. C. De Rocha; War, Councilor A. A. M. Penna; Public Works, Commerce, and Agriculture, Councilor M. A. De Aranjó.

The Council of State was composed of the following members in ordinary: The Princess Imperial, Donna Isabel; Prince Gaston d'Orléans, Count d'Eu; the Senators Viscount de Aboeté, Viscount de Muritiba, Viscount de Bom Retiro; Viscount de Jaguarý; Viscount de Nietheroy, Viscount J. J. Teixeira, Vice-Admiral J. R. de Lamare, and Dr. P. J. de Soares de Souza; and of members extraordinary: Senator Viscount de Paranaguá, Senator M. P. S. Dantas, Councilor Martin Francisco, Viscount de Prados, and Councilor J. C. de Andrade.

The President of the Senate, which comprises 58 members elected for life, was Baron de Cotegipe, and the Vice-President, Count de Baependy. The President of the Chamber of Deputies, with 122 members elected for four years, was Councilor J. F. de Moura; and the Vice-President, J. L. Lima Duarte.

The Presidents of the several provinces were as follow:

Alagóas, Dr. J. R. Torres; Amazonas, Dr. J. L. da Cunha Paranaguá; Bahia, Councilor Pedro Luiz P. da Souza; Ceará, Dr. S. B. Pimentel; Espírito Santo, Dr. H. M. Inglez de Sousa; Goyaz, Dr. C. P. de Magalhães; Maranhão, Dr. J. M. de Freitas; Matto-Grosso, Colonel J. M. de Alencastro; Minas-Geraes, Th. Oltoni; Pará, Dr. J. R. Chaves; Parahyba,

Dr. M. Ventura B.; Paraná, Dr. C. A. de Carvalho; Pernambuco, Councilor J. L. Barrojo; Piahy, Dr. M. J. A. Castro; Rio Grande do Norte, Dr. F. G. C. Barreto; Rio de Janeiro, Dr. B. A. Gavião P.; Santa Catharina, Dr. E. F. L. Santos; São Paulo, Councilor F. C. S. Brandão; São Pedro do Sul, Dr. J. L. Godoy V.; Sergipe, Dr. J. A. do Nascimento.

The Archbishop of Bahia, the Right Rev. L. A. dos Santos (1880), is Primate of all Brazil; and there are eleven bishops: those of Pará, São Luiz, Fortaleza, Olinda, Rio de Janeiro, São Paulo, Porto Alegre, Marianna, Diamantina, Goyaz, and Cuyabá.

**ARMY.**—Pursuant to the law of February 27, 1875, military service is obligatory for Brazilian subjects, while admitting numerous exemptions and substitutions. The period of service in the regular army is six years, and in the reserve three years. The strength in time of peace is 13,000; the army counted, in 1882, 1,743 officers and 11,368 men; the regulation war strength was to be fixed at 32,000.

**NAVY.**—The navy, in 1882, consisted of ten iron- and steel-clads, one steam-frigate, seven steam-corvettes, sixteen steam-gunboats, and five steam-transports, one sailing-corvette, and two sail-avisos, together forty-two vessels; manned by 3,567 men, carrying altogether 166 guns, and having a joint horse-power of 8,660; building, two iron- and steel-clads and one gunboat. The *personnel* of the navy was composed of 15 superior officers, 412 officers of the first class, 73 men forming the sanitary corps, 92 pursers, 50 guardians, and 184 machinists. Imperial Marine Corps, 2,698 men; Naval Battalion, 214 men; apprentices, 997; total, 4,735 men.

**FINANCES.**—The actual revenue of the empire during the fiscal year 1878-'79, according to the accounts rendered in 1882, has been 116,460,981 milreis, while the expenditure proves to have been 181,468,557.

The budget estimate for 1882-'83 is set forth as follows:

INCOME		Milreis.
Ordinary and extraordinary revenue	128,288,000	
Emancipation fund	1,200,000	
Deposits	8,000,000	
Total	127,488,000	
OUTLAY.		Milreis.
Ministry of the Interior	9,332,418	
Justice	6,767,000	
Foreign Affairs	919,906	
War	14,436,076	
Navy	10,695,296	
Agriculture and Commerce	23,283,506	
Finance	61,944,916	
Total	127,284,118	

The expenditure authorized to be made during the fiscal year 1883-'84 runs up 129,823,825 milreis, and differs little in the various items from those above given. In the mean time the Government has placed on the London market a  $4\frac{1}{2}$  per cent loan for £4,000,000, through the Messrs. Rothschild, which was placed at 89.

The national debt stood, on March 31, 1882, as follows:

Five per cent foreign indebtedness, payable in gold .....	Milreis. 141,072,000
Internal debt, payable in paper money, and bearing 4 to 6 per cent interest .....	408,782,000
Floating debt:	Milreis.
Contracted prior to 1837 .....	143,022
Orphan funds and deposits .....	51,622,116
Treasury bonds .....	28,894,700
Paper money issued by the state .....	188,110,978—268,770,511
Total .....	818,574,811

The assets of the Government, March 31, 1882, were: Uncollected taxes, 13,407,483; due to the state by railroads, 13,211,019; due to the state by the Argentine Republic, 15,796,301; and by Paraguay, 227,883 milreis.

About the above national debt the "Diario Official," of Rio, remarks, under date of December 9, 1882: "Four hundred and seven million milreis of the above indebtedness arose from the Paraguayan War; 60,400,000 from state aid extended to our northern provinces during a series of years when the drought afflicted them; and 130,885,000 milreis were spent on railroads and other public improvements."

Since the law of September 28, 1871, the amount of money disbursed under its provisions from the Emancipation Fund has been 12,096,000 milreis, 8,683,859 of which since March 25, 1875. Further payments are to be made without delay, and thus the total available fund of 24,000,000 milreis will soon be disbursed. This is calculated to allay the agitation about the slavery question which has existed in Brazil in 1882.

The Rio correspondent of the "Indépendance" (Brussels) remarks: "Slavery has received a death-blow; everybody tries to get rid of this shameful heritage of the past as fast as possible, so that hardly a day passes but one hears of numerous liberations of slaves. It is, however, necessary, at almost any cost, to procure other hands to replace the emancipated. There is some European immigration, but it does not amount to much, though latterly rather in the ascendant. Hence, it is intended to introduce Chinese coolies, not as a permanent source of immigration, but as an element of transition that is to bridge over the gap between the black field-laborer and the free European tiller of the soil. With this object before them, the coffee-planters of Rio de Janeiro and São Paulo have accepted the proposal made them by the 'China Merchants' Steam Navigation Company' of importing for them twenty-one thousand Chinese coolies within the ensuing three years. It will then be seen whether this importation will answer."

M. Ad. de Fontpertuis, in his work just published in Paris, "Les Nations latines de l'Amérique," remarks about Brazil that it may be divided into three great zones: that of the forests—distinguished by the production of cocoa, India-rubber, sarsaparilla, vanilla, a great variety of gums, nuts, and textile plants, many of the latter three yet unknown in manufacturing countries—that of coffee, and that of cereals.

The foreign-trade movement in Brazil, including the precious metals, is officially given to have been during the ensuing two fiscal years:

	Imports.	Exports.
	Milreis.	Milreis.
1878-'79 .....	162,332,400	206,453,000
1879-'80 .....	173,612,300	222,351,700

The value of exports in contos de reis of 1,000 milreis was distributed as follows among the chief articles:

ARTICLES.	1878-'79.	1879-'80.
Coffee .....	184,029	126,260
Cotton .....	4,614	6,187
Sugar .....	23,374	81,334
Paraguay tea (Herva-Mate) .....	8,289	2,522
Hides .....	8,855	8,950
Tobacco .....	8,069	7,661
India-rubber .....	11,366	12,243
Diamonds .....	1,381	1,007

#### COFFEE EXPORTATION FROM RIO.

YEAR.	To the United States.	To other countries.	Total.
	Bags.	Bags.	Bags.*
1857....	1,077,080	1,492,850	2,570,480
1858....	1,377,050	858,709	2,230,759
1859....	1,408,312	1,077,072	2,485,384
1860....	1,408,845	1,416,812	2,825,157
1861....	907,298	1,626,841	2,534,584
Total.	6,173,530	6,466,784	12,645,314
1862....	473,390	1,346,266	1,819,656
1863....	456,706	1,195,553	1,652,259
1864....	671,389	1,140,540	1,811,929
1865....	863,960	2,383,504	3,197,464
1866....	1,923,743	1,383,892	3,268,685
Total.	4,394,188	7,855,755	11,749,943
1867....	1,501,606	1,754,374	3,255,980
1868....	1,404,129	1,365,800	2,772,929
1869....	1,526,374	1,618,415	3,139,759
1870....	1,630,269	1,024,473	2,704,742
1871....	1,656,844	1,227,782	2,884,626
Total.	7,769,222	6,988,844	14,758,066
1872....	1,388,198	1,077,153	2,460,351
1873....	1,435,800	1,007,909	2,443,709
1874....	1,521,409	1,151,782	2,673,251
1875....	2,041,995	1,110,301	3,152,296
1876....	1,443,424	1,317,408	2,765,922
Total.	7,830,911	5,664,648	13,495,559
1877....	1,710,073	1,136,452	2,846,555
1878....	1,370,333	1,360,516	3,031,199
1879....	2,258,543	1,251,638	3,685,183
1880....	1,886,857	1,676,197	3,563,054
1881....	2,241,976	2,135,442	4,377,418
Total.	9,792,384	7,560,575	17,353,409

#### RECAPITULATION.

To the United States.	To other countries.
6,173,530	6,466,784
4,394,188	7,355,755
7,769,222	6,988,844
7,830,911	5,664,648
9,792,384	7,560,575
35,955,635	34,036,606

The foregoing tables show that, out of the 70,002,291 bags shipped during the twenty-five years, the United States took more than one half.

\* One bag = sixty kilogrammes net.



## COFFEE SHIPMENTS FROM SANTOS.

DESTINATION.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.
	Bags.	Bags.	Bags.	Bags.	Bags.	Bags.	Bags.	Bags.	Bags.	Bags.*
To England and British Channel	37,445	94,622	101,293	92,230	50,103	19,303	65,937	42,080	92,385	111,222
To Hamburg and Bremen.....	78,714	79,544	76,420	124,449	169,631	185,599	127,062	169,459	193,482	219,327
To France, Belgium, and Holland.....	22,912	59,573	50,356	74,348	90,883	195,057	173,653	174,126	273,203	339,588
To the Mediterranean and Lisbon for orders.....	7,128	46,728	36,769	54,561	45,303	41,014	30,167	43,065	85,424	84,600
Total Europe.....	146,199	280,467	264,838	275,588	355,920	450,973	396,824	423,730	644,499	754,797
To the United States.....	61,940	46,074	92,521	27,310	37,737	114,726	140,664	149,787	103,034	215,069
To Rio and coastwise.....	24,360	11,003	8,117	14,144	24,129	16,819	17,069	7,735	6,322	10,240
Grand total.....	232,499	337,544	365,476	317,042	417,786	582,518	554,557	586,252	753,855	980,100

Santos coffee being classified as a so-called "mild" coffee—i. e., pure-flavored—there is more competition for it, and the United States, as the above table exhibits, receive but a moderate proportion of the crop.

## GENERAL COFFEE CONSUMPTION IN LEADING COUNTRIES.

COUNTRIES.	1855.	1878.	Increase.
	Tons.	Tons.	Tons.
United States.....	97,490	142,372	44,882
France.....	26,700	54,120	27,420
Germany.....	61,230	99,364	38,134
Austria.....	18,377	39,876	20,999
Belgium.....	20,136	23,079	2,893
Total.....	224,433	358,811	134,328

Total increase, 60 per cent.

Since slavery was abolished in the southern States of the Union, the consumption of Rio coffee, in particular, has increased more rapidly than ever in the United States, as the negroes prefer this strong coffee to any other.

Next to Rio, the export movement in Brazil-

ian produce has expanded most rapidly at Pará, the port of the Amazon River.

## EXPORT OF LEADING PRODUCTS FROM PARÁ IN 1882.

	Milreis.
To the United States.....	19,436,737
Other countries.....	17,007,529

## TO ALL QUARTERS, 1873-1882 (FIVE YEARS).

YEAR.	India-rubber.	Cocoa.	Brazil-nuts.
	Kilogrammes.	Kilogrammes.	Kilogrammes.
1882....	9,624,569	6,293,673	4,033,200
1881....	8,427,427	5,404,957	6,368,400
1880....	7,977,594	3,121,085	5,252,050
1879....	7,605,589	5,129,339	1,750,037
1878....	7,777,680	2,699,023	4,792,150

## VALUE IN MILREIS.

YEAR.	India-rubber.	Cocoa.	Brazil-nuts.
1882....	30,062,393	3,653,209	606,650
1881....	20,148,578	3,177,199	699,163
1880....	17,559,079	1,765,399	871,276
1879....	14,763,930	4,637,061	272,152
1878....	10,152,538	1,391,763	584,760

## COMMERCE OF THE UNITED STATES WITH BRAZIL, FROM 1859 TO 1879, INCLUSIVE.

FISCAL YEAR ENDED JUNE 30—	EXPORTS.		Total exports.	Imports.	Total imports and exports.
	Domestic.	Foreign.			
1859.....	\$5,929,004	\$827,972	\$6,256,976	\$22,439,842	\$28,696,818
1860.....	5,945,235	335,020	6,280,255	21,214,303	27,495,058
1861.....	4,787,702	235,515	5,023,217	18,100,456	23,123,673
1862.....	3,784,249	84,745	3,868,994	12,757,393	16,656,392
1863.....	4,814,242	185,579	5,000,171	10,945,476	15,945,647
1864.....	5,484,773	102,868	5,587,140	14,441,617	19,973,757
1865.....	6,533,293	95,889	6,629,182	9,849,359	16,478,541
1866.....	5,673,513	108,991	5,782,504	16,391,423	22,616,927
1867.....	5,035,930	164,421	5,200,351	19,132,951	24,333,302
1868.....	5,645,024	197,559	5,842,583	23,682,535	29,525,169
1869.....	5,910,565	158,514	6,069,079	24,912,450	30,981,529
1870.....	5,707,361	110,485	5,817,846	25,175,959	30,993,805
1871.....	5,945,397	143,757	6,089,154	30,560,643	36,649,892
1872.....	5,864,920	121,004	5,985,924	30,134,249	36,120,173
1873.....	7,093,187	106,735	7,199,922	38,558,023	45,757,950
1874.....	7,562,562	142,968	7,705,530	43,911,315	51,617,135
1875.....	7,634,865	110,494	7,745,359	42,038,046	49,778,405
1876.....	7,253,213	94,162	7,347,380	45,453,173	52,800,553
1877.....	7,499,118	88,695	7,587,813	43,498,041	51,086,854
1878.....	8,610,646	76,058	8,686,704	42,972,036	51,658,740
1879.....	8,106,923	87,442	8,194,370	39,335,638	47,530,008
Total.....	130,778,071	3,070,973	133,849,044	576,021,293	709,870,337

## SUGAR IMPORTATION FROM BRAZIL INTO THE UNITED STATES—THIRTEEN FISCAL YEARS.

	Pounds.		Pounds.
1869.....	33,639,921	1876.....	40,010,416
1870.....	24,145,391	1877.....	74,327,436
1871.....	21,553,500	1878.....	78,076,553
1872.....	28,373,952	1879.....	63,380,355
1873.....	55,669,036	1880.....	152,311,613
1874.....	86,894,454	1881.....	231,453,342
1875.....	70,873,278		

The table below exhibits the amount of cotton contributed to the world's supply by Brazil, as compared with other producing countries, during half a century, giving the annual average of each quinquennial period, reduced to millions of pounds:

\* Of sixty kilogrammes net.

## STATEMENT SHOWING THE PRODUCTION OF RAW COTTON, IN MILLIONS OF POUNDS, FROM 1831 TO 1878, BY PERIODS OF FIVE YEARS.

COUNTRIES OF PRODUCTION.	1831 to 1835.	1836 to 1840.	1841 to 1845.	1846 to 1850.	1851 to 1855.	1856 to 1860.	1861 to 1865.	1866 to 1870.	1871 to 1875.	1876 to 1878.
United States .....	405.9	585.7	816.8	964.2	1,254.7	1,638.7	581.7	1,108.6	1,682.8	2,068.8
Brazil .....	80.6	25.3	18.9	28.3	27.1	27.7	86.2	99.9	108.8	55.4
West Indies .....	9.5	13.4	9.4	6.3	6.3	7.2	14.6	33.2	42.3	16.2
East Indies .....	84.2	56.5	72.6	86.7	184.8	207.9	401.8	576.5	538.5	418.7
Egypt, Smyrna, etc. ....	26.4	30.1	23.8	29.7	60.0	57.0	191.4	190.9	288.0	268.2
Total .....	506.6	711.0	941.0	1,110.7	1,482.9	1,988.5	1,265.2	2,009.1	2,609.9	2,842.3

## IMPORTATION OF MERCHANDISE FROM BRAZIL INTO THE UNITED STATES, UNITED KINGDOM, AND FRANCE, AND EXPORT THEREOF FROM THE LATTER THREE COUNTRIES TO BRAZIL.

	1879.	1880.
Import into the United States ..	\$39,875,441	\$51,970,090
“ United Kingdom ..	23,114,980	25,601,051
“ France .....	10,615,000	15,766,161
Total .....	\$73,105,421	\$93,337,302
Export from the United States ..	\$3,194,370	\$5,605,346
“ United Kingdom ..	29,180,908	32,516,620
“ France .....	18,683,700	18,648,488
Total .....	\$51,008,978	\$59,770,454

The principal article of export from the United States to Brazil being flour, we give the particulars of shipments during thirteen fiscal years:

YEARS.	Barrels.	YEARS.	Barrels.
1860 .....	384,184	1876 .....	536,180
1870 .....	376,217	1877 .....	452,209
1871 .....	455,673	1878 .....	616,182
1872 .....	382,216	1879 .....	717,377
1873 .....	408,648	1880 .....	537,914
1874 .....	531,379	1881 .....	677,702
1875 .....	599,382		

An article produced in the province of Paraná, of great importance in its traffic with Montevideo, Buenos Ayres, and Valparaiso, is Paraguay tea (*Herva-Matte*), of which that province exported:

DESTINATION.	1881.	1882.
To Montevideo .....	Tons. 3,254	3,873
To Buenos Ayres .....	7,510	7,729
To Valparaiso .....	1,960	3,787
Total .....	12,724	15,389

So-called “central sugar-factories” (*usines centrales*) are rapidly being introduced throughout the sugar regions of Brazil, and promise to do as good service as they do in Cuba and the French West Indies and other cane-sugar producing countries. One such factory, in the province of São Paulo, we shall give some details about by way of example. This factory, the Companhia Assuacreira de Porto Feliz, began operations on October 28, 1878, and declared a dividend for 1882 of 11½ per cent. It produced last year (1882):

	Milreis.
5,729 bags of sugar, first quality .....	111,121
1,974 “ second quality .....	33,600
1,883 “ third quality .....	20,102
88 “ fourth quality .....	1,320
750 casks of rum .....	12,775
Total .....	178,918

	Milreis.
Brought forward .....	178,918
Sugar-house expenses, including cartage and ordinary labor .....	29,409
Salaries to experienced operatives (engineer, etc.) .....	12,130
Canes purchased .....	92,756
	184,345
Net proceeds of 1882's operations .....	44,573

The “Diário Oficial,” of Rio de Janeiro, of March 15, 1883, contains some interesting notes relative to the development of cotton manufacture in the South American empire, which may prove of value to the manufacturers of cotton machinery in this country. Nowhere, it seems, can cotton be grown so advantageously as in Brazil. Even at the present low price the Brazilian cotton planters in some districts clear an annual net profit on their cotton of twenty per cent. Seventeen years ago cotton manufacture was still in its infancy in Brazil, for there were then but nine mills, with 768 operatives employed therein, 14,875 spindles, and 385 mechanical looms. Total horse-power (steam) at the time, 36; water-power, ditto, 288; yards of tissue turned out, 3,944,600; twist made, 126 tons. Value of total production in 1866, 1,166,200 milreis. At present there are 45 cotton-mills. In the province of Rio de Janeiro there is the Santo Aleixo, founded in 1849; has 7,000 spindles, 160 looms, 130 operatives; makes 1,800,000 yards tissues, and 14 tons twist; produces 400,000 milreis annually. Power, 50 horse, water.

Brazil Industrial, 20,000 spindles, 450 looms, 560 horse-power, water; 400 operatives; products, 3,800,000 yards.

São Pedro de Alcantara, at Petropolis, in 1874, with a capital of 150,000 milreis, 50 horse-power, water. Consumed the past seven years altogether 30,479 bales of cotton; 130 operatives. Has dyeing department, dyeing 200 arrobes of twist per day. Production, 1,200,000 yards.

Fabrica Petropolitana, also near Petropolis; founded in 1874, with a cash capital of 540,000 milreis; 120 horse-power, water; 5,600 spindles and 108 mechanical looms; 200 operatives, drawing salary as to age, \$1 to \$9. Consumes 500 tons Pernambuco cotton. Turns out 1,500,000 yards annually.

The greatest amount of raw cotton exported in any one year from Brazil was reached in 1872, when 78,517 tons were shipped, amounting to 46,445,928 milreis. Now Brazil consumes a great portion of its crop.



**BULGARIA**, a principality of Eastern Europe created by the Treaty of Berlin, signed July 13, 1878, out of a portion of the Christian provinces of Turkey which by rising in rebellion provoked the intercession of Russia and the Turkish War. It lies between Roumania on the north and the autonomous Turkish province of Eastern Roumelia, with Servia on the west, and the Black Sea as its eastern boundary. The estimated area is 24,360 square miles; the population, according to a census taken January 1, 1881, is 1,995,701. It was redivided in August, by a decree of the Council of State, into fourteen instead of fifty-six administrative circuits: Sophia, Tirnova, Shumla, Varna, Vracan, Kustendje, Russen, Rasgrad, Lom, Silistria, Widin, Sevlje, Sistova, and Plevna. The inhabitants are industrious agriculturists. They are adherents of the Greek Church, and speak the Servian tongue. The reigning sovereign is Prince Alexander Battenberg, a grand-nephew of the Emperor of Germany and cousin-german of the Emperor of Russia, who assumed the government, June 28, 1879. The principality pays an annual tribute to Turkey. Since its deliverance it has been administered virtually as a Russian dependency.

**SUSPENSION OF THE CONSTITUTION.**—The attachment of the people to Russia has waned since their independence. Panslavism, as taught to them by its Russian apostles, signified the revival of ancient Slavic freedom as well as the union of Slavic peoples under one government. The Bulgarians received from the Panslavic founders of the principality a constitution on the Western model, which, if not Slavic, was very liberal. The activity of parties, the rivalries of politicians, the spread of the extreme theories of Slavic equality forbidden as Nihilism in Russia, and the agitation for the Great Bulgaria of the Treaty of San Stefano, to be formed by union with Eastern Roumelia, which would be as inopportune to the Russian Government now struggling for the autocratic principle as distasteful to Austria, led Prince Battenberg, with the sanction of his Russian protector, to abolish the Constitution by a *coup d'état* (see "Annual Cyclopaedia" for 1881). A Grand National Assembly, convened for the purpose, invested him with autocratic powers for seven years by a vote taken July 13, 1881.

**EVENTS OF THE YEAR.**—The Conservatives, who had supported the Prince, and the Moderates as well as the Radicals, whose ministry he had dismissed, were scandalized at the methods by which he and the Russian military officers had manipulated the elections. The Conservative party were alienated by the appointment of foreigners and men outside of politics in the new Cabinet. A revolutionary agitation was raised, but the people and their intellectual leaders in Bulgaria and Eastern Roumelia were disposed to wait and see if the Prince would introduce the promised economy and reform in the administration, and govern

better than the politicians, who had pleased the people at large scarcely better than they had the Prince. When months went by without any developments besides the suppression of newspapers, the imprisonment of statesmen, and the rigorous supervision of the school-teachers, popular dissatisfaction revived and took the form of an organized agitation for the restoration of constitutional government, in which both the political parties joined. Deputations and petitions poured in from all parts of the country, until the Prince refused to receive any more, on the pretext that he had been deceived by fraudulent deputations. The Bulgarians, who are simple in their habits and fond of money, were particularly distrustful because there was a heavy deficit instead of a large surplus under the new administration, and because the Prince showed a tendency to lavish expenditure by commencing a \$500,000 palace and assuming airs of royalty. The new officials offended the people by their arrogance and formalism. The taxes, instead of being reduced, were increased by a land-tax, levied in addition to the tithes. The Prince in his perplexities leaned more and more upon the Russian Government. The first ministry, which was suspected of Austrian sympathies, was replaced by creatures of the Russian court. The exploitation of the country by Russian commercial speculators became one of the causes of popular dissatisfaction. The Prince had great difficulty in getting together the Council of State with which he proposed to reform the Government. Before it began to work the country had reached the verge of revolution, and talked of deposing the reforming Prince. In May he visited St. Petersburg to take counsel with his imperial patron. Martial law was proclaimed throughout the country. The agitation was fostered by the intriguing agent-general of the Russian Government, Hitrovo, who the year before had managed the *coup d'état*. This Russian, De Blignières, was finally recalled. Under the directions of the Russian Foreign Office, Prince Battenberg issued orders for the election of a new National Assembly, not, however, with constitutional powers, but without control over the ministry, and even without freedom of debate. The Council of State, which was formed after searching six months for suitable and willing members, had passed several measures, chief of which were the repartition of the country into administrative districts, and the commutation of the tithes into a land-tax. The elections to the fictitious National Assembly took place in the autumn. The militia controlled the balloting, as they did in the *plébiscite* of the previous year. Care was taken that none of the active opponents of the Prince should appear upon the scene, although an entirely subservient Assembly could not be collected, since discontent is universal. Zancoff, one of the Liberal leaders, was cast into prison.

**POLITICAL SITUATION.**—The Prince, who is

a German in education and character, and a scion of the Hohenzollern family, formerly exhibited German tendencies, but he has become the submissive vassal of the Czar. When invited to the throne he was wittily advised by Prince Bismarck to accept, because his reign would be a "pleasant reminiscence." His not ill-intended attempt to govern the independ-

ent Bulgarians as he would a German regiment has brought him into a position where the bayonets of the militia, officered by Russians, are all that prevent his people from driving him out of the country, and where a word from the Russian Foreign Office, which may be spoken at any time, would deprive him of his crown.

## C

**CALIFORNIA.** The State officers during the year were as follows: Governor, George C. Perkins (Republican); Lieutenant-Governor, John Mansfield; Secretary of State, Daniel M. Burns; Treasurer, John Weil; Comptroller, D. M. Kenfield; Superintendent of Public Instruction, F. M. Campbell; Attorney-General, Augustus L. Hart; Surveyor-General, J. W. Shanklin; State Librarian, R. O. Cravens. The Supreme Court was constituted as follows: Chief-Justice, Robert F. Morrison; Associate Justices, M. H. Myrick, G. W. McKinstry, G. W. Ross, J. D. Thornton, J. R. Sharpstein, and S. B. McKee.

**STATISTICS.**—The State tax levy, as fixed by the State Board of Equalization for 1882, is based upon a property valuation of \$582,158,981, or \$51,420,696 less than that of 1881, which was \$633,579,677. For 1882 the tax rate was 59.6 cents on each \$100 of assessed valuation. This was divided for the funds as follows: For the general fund, 27.8 cents; for the schools, 24.3 cents; and for the interest and sinking fund, 7.5 cents. The tax levy for 1881 was 65.5 cents.

According to the report of the State Comptroller, dated February 18th, the securities held in trust for the school fund by the State Treasurer consisted of bonds of the State of California, amounting to \$1,737,500, together with bonds of different counties of the State, aggregating \$251,900.

The money in the State Treasury belonging to the State school fund, subject to apportionment, was \$1,483,413, as follows:

Balance unapportioned August 18, 1881 .....	\$60 96
Amount received from the following sources since last apportionment:	
From property-tax .....	1,215,408 05
From poll-tax .....	157,311 45
From interest on State school-lands .....	42,590 71
From interest on bonds held in trust .....	63,102 58
<b>Total .....</b>	<b>\$1,483,474 00</b>
Less amount refunded to San Joaquin County for an overpayment of interest .....	61 00
<b>Total amount subject to apportionment....</b>	<b>\$1,483,413 00</b>

This was apportioned among the counties according to the number of children therein between the ages of five and seventeen years, which for the whole State was 211,237. The California wheat-crop of 1882 has been estimated at 29,590,500 centals, as against 34,150,000 centals for 1880 and 19,801,000 centals in

1879. The surplus for export will be about 1,111,315 tons, which will require over 550 ships of 2,000 tons each to carry away. This, at \$35 per ton, would amount to nearly \$39,000,000.

A comparison of the statistics at hand for the last five years—1877 to 1881, inclusive—shows the following values of the agricultural and mining products and exports of California for that period:

Wheat—value of exports .....	\$90,806,356
Flour—value of exports .....	14,178,898
Barley—value of exports by sea .....	2,126,582
<b>Total for five years .....</b>	<b>\$107,111,836</b>
Precious metals—product .....	\$91,582,995
Quicksilver—value of product .....	10,957,632
Coal—value of product .....	4,464,662
<b>Total for five years .....</b>	<b>\$107,055,289</b>

In the above statement the values of the wheat, flour, and barley consumed in the State are not noted, as there are no accurate data by which to estimate them. The wheat and barley used for seed purposes form, of course, no element in such a comparison.

The merchandise and produce exports from San Francisco by sea during the twelve months ending December 31, 1881, were as follows:

	1881.
Great Britain .....	\$28,719,868
New York .....	5,434,123
Hawaiian Islands .....	2,686,995
Mexico .....	2,515,302
Belgium .....	2,414,420
Germany .....	90,774
Australia .....	816,646
New Zealand .....	153,930
New Bedford .....	100,690
France .....	1,977,091
Central America .....	739,705
Cape Town .....	127,414
British Columbia .....	1,180,643
China and Hong-Kong .....	5,229,234
Japan .....	483,060
Panama .....	198,089
South America .....	96,749
Cape de Verd Islands .....	84,799
Society Islands .....	877,791
East Indies .....	19,804
Islands in the Pacific .....	46,684
Russian Asia .....	120,445
<b>Total .....</b>	<b>\$58,546,196</b>

The total value for 1880 was \$34,686,759, for 1879 the value was \$36,941,668, and \$33,993,551 for 1878.

The number of through passengers by the Central and Southern Pacific Railroads was as



follows in the first eleven months of the given years:

YEARS.	Arrived.	Departed.	Gain.
1881.....	42,818	28,889	13,929
1880.....	81,915	28,455	8,460
1879.....	33,958	22,257	10,696

The arrivals and departures by rail and sea in the given eleven months are shown in the next column:

YEARS.	Arrived.	Departed.	Gain.
1881—By rail.....	42,818	28,889	13,929
By sea.....	25,818	12,114	13,704
Totals.....	68,636	41,003	27,633
1880.....	44,470	39,943	4,527
1879.....	45,871	36,255	9,616

The population of the State by counties and race, according to the census of 1880, is given in the following table:

COUNTIES.	POPULATION.			COUNTIES.	POPULATION.		
	Aggregate.	White.	Chinese.		Aggregate.	White.	Chinese.
Alameda.....	62,976	57,785	4,402	Plumas.....	6,180	4,761	872
Alpine.....	539	521	17	Sacramento.....	84,390	28,923	4,893
Amador.....	11,884	9,924	1,115	San Benito <sup>6</sup> .....	5,584	5,255	242
Butte.....	18,721	14,270	3,793	San Bernardino.....	7,786	6,988	123
Calaveras.....	9,094	7,532	1,067	San Diego.....	8,618	6,674	229
Colusa.....	13,118	11,698	970	San Francisco.....	238,959	210,496	21,790
Contra Costa.....	12,525	11,712	733	San Joaquin.....	24,349	21,990	1,997
Del Norte.....	2,584	1,731	454	San Luis Obispo.....	9,142	8,783	183
El Dorado.....	10,633	8,860	1,439	San Mateo.....	8,669	8,031	596
Fresno.....	9,473	7,591	753	Santa Barbara <sup>7</sup> .....	9,518	9,135	227
Humboldt <sup>1</sup> .....	15,512	13,313	241	Santa Clara.....	35,039	32,110	2,695
Inyo.....	2,923	2,197	90	Santa Cruz.....	12,802	12,085	523
Kern.....	5,601	4,563	702	Shasta.....	9,492	7,066	1,335
Lake <sup>2</sup> .....	6,596	5,339	469	Sierra.....	6,628	5,337	1,252
Lassen.....	3,340	2,955	50	Siskiyou <sup>8</sup> .....	8,610	6,461	1,568
Los Angeles.....	38,381	31,797	1,170	Solano.....	18,475	17,387	995
Marin.....	11,324	9,791	1,334	Sonoma.....	25,926	24,623	904
Mariposa.....	4,339	3,395	697	Stanislaus.....	8,751	8,186	518
Mendocino.....	12,800	11,185	846	Sutter.....	5,159	4,815	266
Merced.....	5,656	5,015	575	Tehama.....	9,801	8,218	774
Modoc <sup>3</sup> .....	4,399	3,955	17	Trinity.....	4,999	2,780	1,951
Mono.....	7,499	7,032	363	Tulare.....	11,251	10,757	326
Monterey <sup>4</sup> .....	11,302	10,643	372	Tuolumne.....	7,848	6,612	605
Napa <sup>5</sup> .....	13,235	12,160	907	Ventura <sup>9</sup> .....	5,073	4,849	129
Nevada.....	20,823	17,567	3,005	Yolo.....	11,772	11,015	603
Placer.....	14,232	11,882	2,190	Yuba.....	11,284	8,824	2,146
The State.....					864,694	767,181	75,218 <sup>10</sup>

<sup>1</sup> In 1874, part from Klamath.

<sup>2</sup> In 1872, part to Napa.

<sup>3</sup> In 1874, from part of Siskiyou.

<sup>4</sup> In 1874, part to San Benito.

<sup>5</sup> In 1872, part from Lako.

<sup>6</sup> In 1874, from part of Monterey.

<sup>7</sup> In 1871, part to Ventura.

<sup>8</sup> In 1874, part to Modoc, and part from Klamath.

<sup>9</sup> In 1871, from part of Santa Barbara; in 1873, organized.

<sup>10</sup> Including 86 Japanese.

Included in the aggregate are 6,018 colored persons and 16,277 Indians; 518,196 were males and 346,518 females, 571,820 natives and 292,874 of foreign birth.

The number of persons ten years of age and upward, unable to read, was 48,583, or 7.1 per cent; unable to write, 53,430, or 7.8 per cent, of whom 7,660 were native whites and 27,340 colored (including Chinese and Indians).

There were living in the United States 355,157 natives of California. There were 262,533 white males twenty-one years of age and over in the State (135,209 of native and 127,374 of foreign birth), and 66,809 colored, including Chinese and Indians.

On farms there were 237,710 horses, 28,343 mules and asses, 210,078 milch-cows, 2,288 working-oxen, 451,941 other cattle, 4,152,349 sheep, and 603,550 swine. The number of manufacturing establishments was 5,885; capital, \$61,243,784; hands employed, 43,799; value of materials used, \$72,607,709; of products, \$116,227,973.

The yield of barley, according to the census, was 12,579,561 bushels (more than any other State, and more than a quarter of the entire

product of the country); of corn, 1,993,325; of oats, 1,341,271; of wheat, 29,017,707.

**THE DÉBRIS QUESTION.**—Great interest was felt throughout the State in the case of the People of the State of California against the Gold Run Ditch and Mining Company, which for fifty-eight days was on trial before Judge Jackson Temple in the Superior Court, Sacramento County. The defendant is a corporation organized for the purpose of mining by the hydraulic process and selling water to miners and others, and possessing certain mines and mineral land adjacent to the North Fork of the American River, near the town of Gold Run, Placer County. A decision was rendered in June, and the following extract from the opinion of the judge explains the nature and object of the action:

This action is brought to restrain the defendant from dumping its tailings into the North Fork of the American River. It is charged that these tailings being washed down by the current, are deposited in and fill up the channel of the American River below Alder Creek, as well as the Sacramento, impairing the navigation, increasing the liability of both to overflow, and making each overflow more destructive, causing deposits upon the farming lands, thereby rendering

them unproductive, raising the soil-water, which also tends to unproductiveness, and producing malarial and other diseases among the inhabitants of the valley. It is substantially found that much of the tailings come down the streams, filling up the rivers, and producing most of the evils charged. Navigation has been obstructed, much valuable land covered with sand, and that the continuation of the practice will probably be productive of still greater damage.

The finding may be considered for the defendant, however, upon the charge that the *débris* adds materially to the malarial influences, or has obstructed or will obstruct the sewers of Sacramento, or have injuriously affected the sanitary condition of that city. It is found that mining pollutes the water of the rivers with mud, rendering them less suitable for domestic purposes. And that numerous other persons engaged in the same pursuit contribute *débris* to the same streams, but for which contributions the rivers would be able to maintain their channels without serious obstruction, notwithstanding the detritus from the mine of defendant.

#### The judge adds:

I have concluded to so find that when the heavier *débris* is completely impounded mining may be resumed, virtually refusing to hold that the plaintiff may enjoin such operations as only corrupt the water with mud and render it less suitable for domestic and other uses. Perhaps I am somewhat moved to this by the consideration that otherwise mining can never be prosecuted at all. It will probably be impracticable to impound the lighter portion of the sediment. I confess I shrink from a consequence so far-reaching. It seems to be a conceded fact that this is not materially injurious either to navigation or the riparian lands. Counsel denied that there was any intention to assail the prosecution of drift, seam, or quartz mining. There was no material injury from that source. The sediment from such mines is of the same character as the material which can not be wholly impounded. Perhaps this will not materially add to the permitted evil.

Among the facts found by Judge Temple are the following:

The Sacramento is navigable, and has been continuously navigated by steamers, barges, schooners, and smaller craft, and up to 1862 was navigated as far as the city of Sacramento without difficulty by steamers of deep draught, to wit, by boats drawing nine or ten feet of water. That said river has been declared navigable by law to the mouth of Middle Creek, which is above the confluence of the American and the Sacramento. That since 1862 the navigation of said river has been seriously impaired by deposits of mud and sand therein, which have in part come from hydraulic mines; so that now the city of Sacramento can be reached by boats of deep draught during the high stages of the water only, instead of at all times as formerly.

That hydraulic mining, as that term is generally understood, consists in washing and removing from their natural positions into the water-courses and rivers, by means of water, high banks of earth and gravel containing gold, and thereby separating the gold from the earth, sending the residue, consisting of boulders, cobble-stones, gravel, sand, and clay, into the water-courses, the larger portion of which finds its way into the principal confluent of the Sacramento River, and is deposited along said

streams from the place of discharge or dump to San Pablo and San Francisco Bays, the heavier material being first deposited.

That hydraulic mining has been practiced for twenty years to some extent in the mountains of the Sacramento Basin. It attained great magnitude as an industry before 1875, and is still extensively carried on, principally in the counties of Butte, Yuba, Sierra, Nevada, and Placer.

That the *débris* from mines, including the mine of the defendant, has materially contributed to such filling of the river-channel, and thereby has interfered with and obstructed the free and comfortable use and enjoyment of large portions of the land upon the American and Sacramento Rivers.

That the beds of said rivers have already become so widened and filled that the depth of the water therein has been greatly lessened; that said water, at all times, is heavily laden with earthy matters, chiefly from mines; therefore, said rivers are likely to fill more rapidly in the future in proportion to the quantity of hydraulic tailings than in the past.

That thousands of acres of good land in the Sacramento Valley have already been covered by such *débris*, and if some preventive is not applied, much further and greater injury is likely to ensue in the future, and large tracts of land will probably be rendered within a few years unfit for cultivation and inhabitation.

That if the said acts of the defendant and others, mining as aforesaid, are allowed to continue, there is imminent danger that the beds and channels of the lower portion of the American River, and of the Sacramento River below the mouth of the American, will be so filled and choked up by tailings and other deposits that said rivers will be turned from their channels, cutting new water-ways, injuring or destroying immense tracts of land, and probably will result in greatly impairing the navigability of the Sacramento River.

That the acts threatened to be performed by the defendant in continuing to prosecute its mining industry in the manner set out in these findings, as it will do unless restrained, if allowed to be done, will, in connection with like acts by others, obstruct the navigation of the Sacramento River, and fill up, to some extent, Suisun Bay, destroy or injure large amounts of land, and constitute an obstruction to the free use and enjoyment of the property of a large number of citizens of this State.

From these facts the judge drew the following legal conclusions:

1. That the plaintiff's cause of action and its right to the relief in this action demanded, is not barred by all or either of the statutes of limitation pleaded by the defendant in this case or otherwise.

2. That defendant has not acquired any right to the use of the bed of the American River, or of the Sacramento River, as places of deposit for its mining tailings, nor to choke or fill with such tailings the channels of said rivers in the valleys thereof, nor to



flow or overflow the said lands situate along the bank thereof.

3. That the said acts of defendant constitute a public nuisance, in that they are an obstruction of the free use by a considerable number of the citizens of this State of their said lands situate along the banks of said rivers as aforesaid, so as to interfere with the comfortable enjoyment thereof, and in that they unlawfully obstruct the free passage and use in the customary manner of the said Sacramento River.

4. The mining customs, usages, and regulations authorized by the statutes of this State, or recognized by the decisions of its courts, are local in their operation, and have not, and are not intended to have, any effect beyond a mining-bar, diggings, or district in which they have been adopted or recognized.

5. That the mining laws and mining customs or practices of the said Gold Run mining district, in which said defendant's mines are located, mentioned and referred to in the findings of fact herein, were not intended to, and did not, and can not, protect the defendant in the doing of the acts, matters, and things complained of in this action.

6. That the plaintiff is entitled to a decree of this court restraining and enjoining the defendant, its superintendents, agents, and employés from discharging or dumping into said North Fork of the American River, or into Cañon Creek, and also from suffering or causing to flow into said river any tailings, bowlders, cobblestones, gravel, sand, clay, *débris*, or refuse matter perpetually, or until it shall be first shown, upon application made to this court for a modification of such decree, that dams shall have been built in said American River, which will prevent the heavier portion of said material, including the coarser sands, from coming below Alder Creek, or until some other means equally efficacious shall be adopted to impound said *débris*, and which, in the opinion of the court, upon such application, will certainly prevent sand, and all heavier material than sand, from being carried by the water below Alder Creek.

The following is the decree made:

This cause having been duly called for trial upon the complaint and answer, and both parties appearing and waiving a jury trial, the said cause was duly tried before court without a jury, and the court having heard the evidence and the argument of counsel, has duly signed findings of fact and conclusion of law therefrom, which said findings are now duly filed in this court.

Now, therefore, by reason of the premises and of the law, it is considered by the court, and it is ordered, adjudged, and decreed:

That said defendant, and all the officers, superintendents, foremen, agents, and employés thereof, be perpetually enjoined and restrained from discharging or dumping into the North Fork of the American river, or into any stream tributary thereto, and especially into Cañon Creek, any bowlders, cobblestones, gravel, or sand from the mines; also from causing any such material to flow or to be washed into said river from its said mines or tracts of mineral land.

Subject, nevertheless, to this, that said defendant may at any time, as it shall be advised, apply to this court to have this decree and restraining order modified or vacated and set aside. And whenever upon such showing it shall appear that efficient means have been provided to impound, detain, and hold back such tailings at any point on said American River above Alder Creek, and that such means are sufficient to detain all bowlders, cobblestones, gravel, and the heavier sand, then said defendant shall be entitled to have said decree vacated and set aside.

This result is regarded as a compromise between the extreme views of the farmers on the one hand, and the miners on the other, and as such is favorably looked upon in many quarters. The case will doubtless be carried

by appeal to the Supreme Court. In the course of his findings the judge made the following statement respecting the mining industry of the State:

Competent persons estimate the entire product of gold from California mines at \$1,154,689,039 up to June, 1881, \$900,000,000 being from the ancient channels. The present yield varies between fifteen and twenty millions per annum, and there is, no doubt, much more gold still remaining in these ancient channels than has been washed out.

Present investments in California mines are estimated at \$150,000,000, \$100,000,000 of which is in hydraulic mines. Some portion of this is, no doubt, in mines which can not be profitably worked.

Mining for gold is the principal industry in fifteen counties of the State, and the population of the mining counties is over one hundred thousand.

This decision was followed by conventions of persons interested on the one side and the other of the question.

A convention of miners was held in Nevada City on the 22d of July, which adopted the following resolutions, among others:

*Resolved*, That this meeting, which is composed of all classes in this community, embracing not only miners of all kinds, but also merchants, mechanics, agriculturists, and laborers, fully realizes the fact that, if mining be stopped or seriously injured, it will result in destroying the value of all sorts of property in these now prosperous counties of Nevada, Sierra, Plumas, and the mining portion of Yuba County; we, therefore, acting in the defense of all classes, pledge ourselves to resist in all proper ways the attacks made upon us by the anti-miners.

*Resolved*, That while we admit that a certain amount of damage has been committed, consequent upon mining operations, yet this damage has been grossly exaggerated, and represents but a small percentage in value of the vast mining industry and the interests which directly and indirectly depend upon mining.

*Resolved*, That with the help of the aid proposed to be given by the General Government, it is now within the power of the miners, and particularly of the miners on the Yuba water-shed, to prevent further damage by the construction of one or more dams across the Yuba River, for the purpose of impounding such *débris* as may hereafter find its way into that river, and also for the purpose of retaining the vast quantities of *débris* now in that stream and its tributaries from passing down into the plains.

*Resolved*, That in consequence of the late opinion of Judge Temple, in whom we recognize an upright and non-partisan judge, we advise the miners upon the water-shed of each river flowing from the Sierra Nevada into the Sacramento or San Joaquin Valley, to follow out the mode judiciously set forth in that opinion, and to organize upon each water-shed where mining is carried on, an association similar to that proposed for the Yuba River, and for the same purposes.

An Anti-Débris Convention held a two days' session in Sacramento, beginning on the 26th of September. About one hundred and ten delegates were present, representing the counties of San Joaquin, Sacramento, Yolo, Butte, Sutter, Yuba, Colusa, Placer, Tehama, and the State Grange Patrons of Husbandry. The call for this convention recites that the object for which it is called is the organization of the residents and property-holders of the Sacramento and San Joaquin Valleys into a compact body, in order that complete protection may be afforded to all persons, property, and water-courses therein, from further injury by the

vicious and now judicially condemned system of hydraulic mining.

It was stated by the temporary chairman that "the territory subject to the evils of hydraulic mining is larger than either Massachusetts or New Jersey, and nearly the size of Vermont, and in it dwell 118,785 people, and in it is property valued at the lowest at \$77,000,000. The section has already suffered over \$23,000,000 at the lowest calculation. Through the territory affected the Sacramento River flows, staggering with loads of *débris* from the Feather and American Rivers. The value of the navigation of this stream is partially shown by the statement that this year 83,000,000 bushels of wheat will be shipped to market by it, of which 7,000,000 were raised on the margins of the Feather River."

Provision was made for the formation of a permanent organization to further the objects of the convention. The following resolutions, among others, were adopted:

*Resolved*—1. That we disclaim any desire to interfere with either drift or quartz mining, or to do anything against any lawful rights of hydraulic miners.

2. That as it is the duty of the State of California to defend herself against such terrible mutilation, and to protect the people of the valley in the peaceful enjoyment of their homes and of the fruits of their labors, and as the two leading political parties have ignored this duty, we call upon the people of the State, irrespective of political affiliations, to aid us in the defense of our homes and in our demands for justice by electing representatives to the next Legislature only such candidates as are willing to pledge themselves to the promotion of these objects.

3. That we favor the passage of a law whereby the several parties committing a common nuisance may be joined in one suit.

4. That the system of impounding mining *débris* by the construction of dams in our rivers and their tributaries is a delusion and a snare, and would prove a constant source of danger, and that we are opposed to remedial measures based on such a system, and pledge ourselves to resist all legislation looking to a compromise of the slickens question on such a basis; that we oppose the expenditure of one dollar of the recent appropriation made by Congress for improving the navigation of the Sacramento and Feather Rivers and their tributaries by the construction of dams for impounding mining *débris*, and demand that it be expended in accordance with the letter and spirit of the law in improving the navigation by deepening their channels.

A committee of twenty was appointed to attend the Farmers' Convention to be held in Stockton on the 7th of October, to which committee was referred the question of nominating candidates.

A convention of citizens and supervisors of the counties interested had been held in Sacramento on the 3d of May, by which resolutions similar to the foregoing had been adopted, and concert of action among the supervisors provided for.

**RAILROAD TAXATION.**—Among the questions relating to railroads which have arisen under the new Constitution of the State, perhaps that of taxation has been the most vexed. The disputes culminated in the case of the County of San Mateo against the Southern Pacific Rail-

road Company, originally commenced in the Superior Court of the State and removed into the United States Circuit Court, which reached a decision in September before Justices Field and Sawyer.

By the Constitution of California, all property in the State, not exempt under the laws of the United States, is, with certain exceptions, to be taken in proportion to its value, to be ascertained as prescribed by law; but, in the ascertainment of its value as a basis for taxation, a distinction is made between the property owned by individuals and that owned by railroad corporations. By the thirteenth article, a "mortgage, deed of trust, or other obligation by which a debt is secured, is treated, for the purposes of assessment and taxation, as an interest in the property affected thereby," and, "except as to railroad and other *quasi* public corporations," the value of the property affected, less the value of the security, is to be assessed and taxed to its owner, and the value of the security is to be assessed and taxed to its holder (section 4). But by the same article "the franchise, roadway, road-bed, rails, and rolling stock of all railroads operated in more than one county" are to be assessed at their actual value, and apportioned to the counties, cities, and districts in which the roads are located, in proportion to the number of miles of railway laid therein. No deduction from this value is allowed for any mortgages on the property.

By the Constitution there is also a different system of assessment provided for "the franchise, roadway, road-bed, rails, and rolling-stock" of railroads operated in more than one county from that provided for the assessment of other property. The assessment of other property is to be made in the county, city or district in which it is situated, in the manner prescribed by law; and the supervisors of each county constitute a Board of Equalization of the taxable property of the county, and must act upon prescribed rules of notice to its owners. A State Board of Equalization is also created by the Constitution to equalize the valuation of the taxable property of the several counties, so that equality may be preserved between the tax-payers of the different localities, and its action in this respect must likewise be upon prescribed rules of notice.

The assessment of the franchise, roadway, road-bed, rails, and rolling-stock of railroads operated in more than one county in the State is to be made by this State Board. And in making it the board is not required to give any notice to the owners, nor is any provision made for affording them an opportunity to be heard respecting the valuation of their property. The tenth section of the article which confers this power of assessment has been held by the Supreme Court of the State to be self-executing, requiring no legislation for its enforcement.

The railroad company contended that the



taxes are invalid and void on two grounds: First, because the assessment, according to which they were levied, was made in pursuance of the discriminating provisions of the State Constitution, in the enforcement of which the company was not allowed any deduction from the valuation of its property for the mortgage thereon, and was thus subjected to an unjust proportion of the public burdens, and denied the equal protection of the laws guaranteed by the fourteenth amendment of the Federal Constitution; and, second, because the assessment was made in pursuance of provisions of the State Constitution, which gave no notice to the company, nor afforded it any opportunity to be heard respecting the value of the property, or for the correction of any errors of the board, thus depriving it of its property without due process of law guaranteed by that amendment.

The plaintiff, on the other hand, contended: 1. That the power of taxation possessed by the State is unlimited except by the Constitution of the United States, and that its exercise can not be assailed in a Federal court, either for the hardship or injustice of the tax levied.

2. That the classification of property for taxation, and the apportionment of the taxes according to such classification, are not forbidden by the Constitution of the United States; and that within such classification the property of the railroad company and the apportionment of taxes to it are to be placed.

3. That the fourteenth amendment of the Constitution of the United States was adopted to protect the newly-made citizens of the African race in their freedom, and should not be extended beyond that purpose.

4. That corporations are not persons within the meaning of that amendment.

5. That the statute fixing the sessions of the State Board of Equalization and requiring a statement in writing from the defendant of the amount and value of its property, afforded all the notice and hearing essential to the validity of the assessment made; and—

6. That the provisions of Article XIII of the Constitution, as to the taxation of railroad property, are to be treated as conditions upon the continued existence of railroad corporations.

The court decided in favor of the railroad company that the provisions of the California Constitution relating to the assessment and taxation of railroads were repugnant to the terms of the fourteenth amendment to the Federal Constitution, and that the taxes sued for could not be recovered. The case now goes to the Supreme Court of the United States. It is claimed that the logic of this decision renders invalid many provisions of the State Constitution relating to the railroad commission created by it.

**POLITICAL CONVENTIONS.**—The political campaign, while not an excited one, aroused deep

interest. The chief local questions were the "slickens" or *débris* question, the Sunday law, the management of railroads, and the restriction of Chinese immigration. No new Sunday law had been enacted, but the attempted closing of drinking-saloons by the temperance people under the old law called forth the opposition of the saloon keepers and frequenters. The act of Congress relating to Chinese immigration, while not giving the people of the Pacific coast all that they had demanded, yet sets that question at rest for the present.

The Democratic State Convention met in San José on the 20th of June, and remained in session five days. The following platform was adopted:

The Democracy of the State of California, as represented in convention, hereby declare that, with unshaken faith in the soundness of the constitutional principles and traditions of the Democratic party, as illustrated by the teachings and example of a long line of Democratic statesmen and patriots, and expressed in the platform of the last Presidential Convention of the party, we pledge ourselves to maintain these principles and to labor to make them paramount in the administration of the State and General Government.

*Resolved*, That the Democratic party of California tenders its thanks to the Democracy of the Union for a long, earnest, and partially successful struggle, through the Democratic Congressmen, with a hostile Republican Administration against Chinese immigration and in behalf of the highest interests of the people of this coast. Such action again illustrates the fidelity of the party to its pledges, given to the people in the platforms of successive Presidential Conventions. It again recognizes that the people of each locality are the best judges of their own wants and necessities, and again declares the great doctrine that it is the duty of the General Government to heed their complaints, and to extend its strong arm for their protection.

*Resolved*, That the Democratic party of California recognizes with the highest appreciation the prompt and determined movement in their behalf made by the working-men of the Eastern States, and notably of Pennsylvania, in presenting the menace of a free people as an irresistible power against the combined efforts of vast moneyed corporations and the monopolists of the Chinese trade, who, in the name of the brotherhood of man, and under the cloak of universal charity, were endeavoring to thwart every effort made in behalf of the permanent existence of the white man of California; we recognize the interests of white labor everywhere as in full alignment with the advancing movement of the Democracy of the Union in its purpose to preserve the heritage we have a right to enjoy from the merciless ravages of the Asiatic hosts who have already captured many of our best industries, impoverished thousands of our people, drawn large numbers into debauchery and crime, and almost excluded Eastern and European immigration.

*Resolved*, That the Chinese now in California are an unmixed curse to this people, their presence an ever-increasing evil, threatening to block every avenue of labor and every branch of trade, and, so long as they remain, will continue to be an insurmountable barrier in the pathway of California toward the high destiny for which Nature has so amply equipped her; that, in view of this condition, we confidently appeal to the Democracy of the Union for our deliverance, and claim as one of the first duties of the party that the next Presidential Convention of the Democracy shall declare the doctrine of self-preservation the highest law of nature and of nations upon this subject, as upon all others, and the Government of the United States, then placed under Democratic administration, will in-

dictate its just appreciation of the imperious necessities of the people of California, by providing such certain and speedy means as may be deemed most just and proper for the removal of every Mongolian from this country, and to the accomplishment of this end we hereby pledge to the people our earnest and persistent efforts, inviting every citizen of this State who has the Commonwealth at heart, whatever his present or previous political affiliation, to lend us the aid of his personal support as a freeman toward strengthening the right arm of the Democratic party of the Union, whose fidelity has been proved, for the early and perfect accomplishment of this great work.

*Resolved*, That the constant pretense of the Republican party organs, and of the Republican leaders in California and in the Eastern States, that the "ten-year law" had taken the Chinese question from the arena of political issue, is deceptive in purpose, and will ever be false in fact so long as the Chinese remain in this country.

*Resolved*, That the Democratic party, inheriting the doctrine of Jefferson and Jackson, hereby declares its unqualified enmity to all sumptuary legislation, regarding all such exercises of the law-making power as against the just objects of free government, and that all laws intended to restrain or direct a full and free exercise by any citizen of his own religious and political opinion, so long as he leaves others to enjoy their rights unmolested, are anti-Democratic and hostile to the principles and traditions of the party; create unnecessary antagonism; can not be enforced, and are a violation of the spirit of republican government; and we will oppose the enactment of all such laws, and demand the repeal of those now existing.

*Resolved*, That the railroad fares and freights should be materially reduced, discriminations in favor of localities and persons should be prohibited, and we condemn the majority of the Railroad Commissioners of this State for their faithlessness in the discharge of their official duties. The nominees of the Democratic party will, if elected, carry out in letter and in spirit the declarations of this resolution, and relieve the people, to the extent of their jurisdiction, from the exactions and injustice now practiced with impunity by the railroad companies.

*Resolved*, That most speedy and effective measures should be taken to compel the railroad corporations of California to pay their taxes. No compromise should be made. The property of every corporation, as well as that of every individual, should be assessed at its true value, and the payment of the resulting tax be strictly and impartially enforced.

*Resolved*, That all railroad land grants forfeited by reason of non-fulfillment of contracts should be immediately revoked by the Government, and that henceforth the domain be reserved exclusively as homes for actual settlers.

*Resolved*, That the Democratic party declares its unalterable purpose to restrain all private and public corporations within the exact letter of their lawful powers, and to prevent any and all imposition upon individuals or the public, whether attempted under the features of "lawful right," or in the arrogance of accumulated money power, and favors the referring enactment of all needful legislation toward this end.

*Resolved*, That the rivers and harbors of this State belong to all the people, and that it is the duty of the Federal Government to protect them from destruction, and to so improve them from time to time as to keep them forever open as channels.

*Resolved*, Recognizing the fact that much of the corruption in politics results from the enormous patronage in the hands of the President of the United States, and its unscrupulous use in carrying elections and maintaining the party in power; and that, so long as the temptation exists, this patronage will be used, thereby degrading party contests to the debasing level of a mere scramble for the petty offices in the gift of the Executive Department, the Democratic party of the State of California announces itself as in favor of

a reform of the civil service of the country upon principles similar to those proposed in the bill introduced in the Senate of the United States by Senator Pendleton, of Ohio.

*Resolved*, That the Democratic party recognizes the duty of the State of affording to every child within its limits the advantages of a common-school education, and it believes in fostering and protecting the common schools and maintaining in them the highest standard of efficiency.

The following is the ticket nominated:

For Governor, George Stoneman; for Lieutenant-Governor, John Daggett; for Judges of the Supreme Court, J. R. Sharpstein, E. M. Ross.

For Congressmen at large, Charles A. Sumner, John R. Glascock; for Secretary of State, T. L. Thompson; for State Comptroller, John P. Dunn; for State Treasurer, W. A. January; for Attorney-General, E. C. Marshall; for Surveyor-General, H. I. Willey; for Superintendent of Public Instruction, W. T. Welcker; for Clerk of the Supreme Court, J. W. McCarthy.

Congressmen—First District, W. S. Rosecrans, of San Francisco; Second District, James H. Budd, of San Joaquin; Third District, Barclay Henley, of Sonoma; Fourth District, P. B. Tully, of Santa Clara.

Board of Equalization—First District, Charles Gildea, of San Francisco; Second District, W. M. Crutcher, of Placer; Third District, Caleb S. Wilcoxson, of Sutter.

Railroad Commissioners—First District, J. G. Carpenter, of El Dorado; Second District, William P. Humphreys, of San Francisco; Third District, W. W. Foote, of Alameda.

The Republican State Convention met in Sacramento on the 30th of August, and remained in session four days. The following platform was adopted:

The Republicans of California, in State Convention assembled, do announce and declare:

1. We reaffirm our adherence to the principles of the Republican party as embodied in its history.

2. We lament the death of our late President, James A. Garfield. His lofty patriotism and heroic character endeared him to the people. His memory will be fondly and forever cherished by his countrymen.

3. We reaffirm the platform of the national Republican party as declared at Chicago in 1880.

We have faith in the wisdom of the present Administration, and confidence that it will result in honor and additional laurels to our party and its cause.

4. We point with pride to the financial policy of the Republican Administration, which has with unexampled rapidity reduced the national debt while improving the national credit, lessened taxes while increasing revenues, and lowered the rate of interest on the national bonds while adding to their value in the markets of the world.

5. History and experience unite to prove the necessity of preserving one day in seven as a day of rest from labor. Without legislation on this subject the laboring-classes might be compelled to continue in unceasing toil. Therefore, we are in favor of observing Sunday as a day of rest and recreation; and while we expressly disavow the right or the wish to force any class of our citizens to spend that day in any particular manner, we do favor the maintenance of the present Sunday laws, or similar laws, providing for the suspension of all unnecessary business on that day.

6. Corporations are creatures of law and subject to



law, and all legal means should be taken to render it impossible for aggregations of capital to become oppressive.

7. While we recognize the fact that the building of railroads has proved one of the most potent agencies in the development and progress of the country, we at the same time remember that the great power which authorized such roads to be built, including the sovereign right of eminent domain, was granted to the railroad companies by the people, for the people, and on the sole ground that the construction and working of railroads constitute a public use, and such roads public highways.

We declare that railroad companies, the same as individuals, should be dealt with in fairness and without injustice; but, by reason of their relation to the people, they must be kept subordinate to the interests of the people, and within governmental control.

The people should be protected by law from any abuse or unjust exactions.

Unjust discriminations against individuals or localities should be prohibited.

Equal service upon equal terms to all persons should be enforced.

Charges for transporting persons and property should be limited to what is required to pay the legitimate expenses of operating such railroads, their maintenance in good repair, and a fair interest on their actual value. Such value should bear the same relation to its assessed value that the value of other property does to its assessed value.

Charges in excess of this are in violation of the fundamental law of public use, which allows railroads to be built; and we hereby pledge our nominees for Railroad Commissioners to the enforcement of these principles by such a material and substantial reduction of the rates of fares and freights as will secure that result—the basis being cost of service with reasonable allowance for interest and repairs as above indicated, instead of the mercenary exaction of "all the traffic will bear."

8. That the proper public authorities should not refuse to act in regulating freights and fares by reason of lack of exact information in any particular, if such information could be given but is refused by the railroad corporation, but in such case these authorities should act as nearly correctly as possible, taking care, however, that the public interest should not suffer, and holding themselves in readiness to correct any error, if error there should be, upon the corporation giving the necessary information to enable such error to be corrected.

9. We denounce the railroad contract system as a deliberate attempt to enslave the commerce and trade of the whole Pacific coast, and subjugate them to the control and caprice of the railroad companies. It is against public policy, because it seeks to make use of the national bounty to break down that healthful competition which it is the policy of the nation to encourage. It is unjust and oppressive, because it discriminates in favor of the strong at the expense of the weak, and offers bribes to the rich which it collects back from the poor. It is arbitrary and tyrannical, because it arrogantly interferes with the freedom of trade, and proposes to prohibit those who make use of its transportation facilities from doing business with any one who refuses to submit to its dictation. Its existence is a threat, and its abolition a necessity. The Republican party pledges itself to prohibit the making of such contracts by proper legislation, to the extent, if necessary, of making the same a public offense.

10. We demand of Congress legislation governing the carrying-trade between the States or States and Territories. The rates of freights and fares of all railroads engaged in such trade should be justly regulated and restricted, and any unjust discrimination between persons or places should be absolutely prohibited.

11. That we are opposed to granting any further

subsidies to companies or corporations, and are in favor of the immediate revocation of all land grants and subsidies forfeited by non-fulfillment of the conditions of such grants, and the restoration of such lands to the public domain, to be held exclusively for actual settlers.

12. All property should pay its just share of taxation. The property of corporations, like other property, should be assessed at its actual cash value, and the corporations and individuals alike should be compelled to pay their just taxes without abatement, diminution, or compromise.

13. The Republican party has always advocated liberal appropriations for the improvement of rivers and harbors, and we declare it to be the duty of the Federal Government to maintain the natural channels of internal commerce in their highest standard of usefulness, as a trust committed to it by the Constitution of the United States, and as a constant check upon the exorbitant exactions of artificial highways.

14. We are in favor of establishing a Bureau of Statistics of Labor, for the purpose of collecting and publishing such statistics and other information in regard to labor and wages as may be useful to the laboring-classes.

15. The Republican party is unalterably opposed to Chinese immigration. It is a cause for congratulation that this question, which has heretofore engaged the earnest attention of both political parties, has at length been settled by suspending further immigration, the treaty having been framed by Republican commissioners and ratified and approved by a Republican Administration. We offer our thanks to our Senators and Representatives in Congress for the legislation procured by them on this subject.

16. The same principles which guide the administration of well-ordered private affairs should prevail in the selection of public officers. Honesty, efficiency, and fidelity should be the essential qualifications for public position, and such rules should be established to regulate appointment to the public service as will insure fitness, to be ascertained by practical tests, and promotion should follow faithful service. The Republican party of California demands a thorough, radical and complete reform in the modes of appointment to subordinate executive offices, founded upon the principle that public office is a public trust, admission to which should depend upon proved fitness, to be ascertained by methods open to all applicants and regulated by law.

17. Finally, we insist upon economy in the administration of the Government, integrity in office, and honesty and efficiency in every branch of the public service.

The following planks were added:

The Republican party demands that the public schools shall receive generous support as the policy of free government; that education, from the primary school to the State University, shall be free and within the reach of the children of every citizen; that in furtherance of this principle we recommend to the Legislature the establishment of some system by which the State should print and provide the principal reading and other text-books used in the public schools, supplying the same to pupils at actual cost.

The following is the ticket nominated:

Governor—Morris M. Estee, of Napa; Lieutenant-Governor, A. R. Conkling, of Inyo; Secretary of State, F. A. Pedlar, of Yolo; State Comptroller, W. A. Davies, of Tuolumne; State Treasurer, John Weill, of Sierra; Attorney-General, A. L. Hart, of Colusa; Surveyor-General, William Minto, of Modoc; Superintendent of Public Instruction, S. D. Waterman,

of San Joaquin; Clerk of the Supreme Court, Frank Gross, of San Francisco; Justices of the Supreme Court, John Hunt, Jr., of San Francisco, and S. C. Denson, of Sacramento.

Congress—First District, Paul Neumann, of San Francisco; Second District, Horace F. Page, of El Dorado; Third District, J. J. De Haven, of Humboldt; Fourth District, George L. Woods, of San José; at large, Henry Edgerton, of Sacramento and W. W. Morrow, of San Francisco.

Board of Equalization—First District, R. P. Johnson; Second District, L. C. Morehouse, of Alameda; Third District, G. G. Kimball, of Tehama; Fourth District, C. W. Dana, of San Luis Obispo.

Railroad Commission—First District, Charles F. Reed, of Yolo; Second District, Charles Clayton, of San Francisco; Third District, E. M. Gibson, of Alameda.

Morris M. Estee, the Republican candidate for Governor, was born in Warren County, Pennsylvania, in 1833. At the age of twenty he went to California. After following various occupations, he was admitted to the bar of the Supreme Court in 1859. He was elected to the Assembly from Sacramento County in 1862. He served one term as District Attorney of Sacramento County. In 1866 he removed from Sacramento to San Francisco. For the greater part of his political career he has been a Republican. He was Secretary of the Republican State Central Committee in 1871, when Newton Booth was elected Governor. In 1872 he came out for Greeley on the Democratic ticket, and opposed the election of General Grant. In 1875 he was elected on the Independent or "Dolly Varden" ticket to the Assembly from San Francisco, and was elected Speaker of the Assembly for that session. He was elected as delegate at large to the Constitutional Convention which framed the present Constitution of the State in 1879, and was chairman of the Committee on Corporations in that body. Mr. Estee is a vigorous campaign speaker.

The Greenback State Convention met in San Francisco on the 6th of September. The platform adopted is practically a reproduction of that adopted by the St. Louis Convention of the previous March, with the addition of a clause favoring the Sunday law in a modified form. It nominated a full State ticket, Thomas J. McQuiddy being the nominee for Governor and Mrs. Marion Todd for Attorney-General.

The Prohibition Home Protection party also held a State Convention in San Francisco, and adopted a platform of principles, including the following:

We declare the cardinal principles of our party to be the prohibition, by constitutional amendment, of the manufacture of all alcoholic liquors not demanded for medicinal, mechanical, or scientific use, and the regulation by law, under severe penalties, of the sale of alcoholic liquors for such use, and the absolute and total prohibition of the sale for any other purposes.

We demand the enactment and enforcement of an

intelligent and rational Sunday law, and especially do we demand that all saloons or places of business where intoxicating drinks are now licensed to be sold or permitted to be sold on secular days shall be absolutely closed on Sunday.

We emphatically protest against all State subsidies or other countenance to encourage the business of making intoxicating drinks from grapes.

We believe that the State should assume control of the water-supply for irrigating purposes, and provide at once by suitable legislation for the equitable distribution of the same.

We shall insist upon such amendments to existing laws as shall fully and forever enfranchise the women of our country.

The following resolution, which was adopted, brought on a warm debate:

*Resolved*, That we hail with pleasure the cultivation of the grape in this State, as offering our people a most pleasant, healthful, and remunerative occupation, and an incalculable and inexhaustible mine of wealth for centuries to come. An unlimited market will always be found for all the raisins, sirups, canned fruit, and fresh grapes that the State can produce. We are assured from our own experience so far, and from the past history and the present condition of the people who have prostituted the luscious grape to the vile uses of drunkenness, that the wine and brandy manufacture is the most degrading, demoralizing, depraving, and pauperizing business which has ever cursed the world. We point for the truth of this to the utter ignorance, poverty, drunkenness, and moral ruin which have enshrouded Spain, Portugal, Italy, Sicily, Greece, Hungary, and the wine districts of Switzerland; to the vice, turbulence, drunkenness, insanity, and suicides of France, and to the rapid degeneration of its people. We point to the fact that only one half of the young men of France are physically fit for military duty when they arrive at legal age. We denounce the promises of wealth from the production of wine as entirely baseless and false.

A resolution was adopted setting out that the loss to the State's revenue through prohibition would be more than compensated for through the diminution of taxes for the support of criminals and paupers, who will disappear with the success of prohibition.

A ticket was nominated by this convention, headed by Dr. R. H. McDonald, of San Francisco, for Governor.

The Farmers' Anti-Monopoly Convention met in Stockton on the 7th of October. The platform adopted related chiefly to the railroad question, and was in substance as follows: Railroads to be controlled by the State; justice to both labor and capital; railroads are public highways, to be operated for the transit of all persons and property on equal and impartial terms. Railroad operatives are common carriers, and their charges should be based on "cost of service," against all kinds of discrimination. Insurance no longer should form a part of the contract for carriage, but should be optional. Carriers by rail to be liable as are bailees for hire. Railroad charges are excessive. The management of railroads by private corporations is a public trust. Private tariffs and special contracts condemned, and they should be made offenses before the law. Favoring the Reagan bill. The Legislature to re-enforce the powers of the Railroad Commissioners by enlarging legal remedies,



etc. Revision of all the laws relative to railroads, defining their rights and duties, and enforcing obedience.

The final plank, referring to the recent decision of the United States Circuit Court as to railroad taxes, and the proper assessment of railroad property, reads:

To award the time necessary to secure a decision of the question by the United States Supreme Court before action would derange the finances of the State and counties to such a degree that we deem it best to assume the correctness of the decision, and amend the Constitution at the coming session of the Legislature, so as to make the mode of assessing railroad property subject to mortgage the same as that adopted in the case of individuals, and provide for the assessment and collection of the taxes remaining unpaid.

The candidates for Railroad Commissioners were required to agree to move within thirty days after election to reduce freights and fares 20 per cent.

For Railroad Commissioners the Democratic candidate in the Third district and the Republican candidate in the First were endorsed. In the Second district John T. Doyle, a Democrat, was nominated. For the State Board of Equalization the Republican candidates in the Fourth and Second districts and the Democratic candidate in the Third were endorsed. In the First district, James Withington, of San Francisco, a Republican, was nominated. For Controller, the Democratic candidate was endorsed. No other nominations were made by the convention.

The election in November resulted in the choice of the entire Democratic State ticket by a large majority, and of Democratic congressmen in each district. The new Legislature will be largely Democratic in both branches.

The vote for Governor was as follows: Total, 164,657; Democratic, 90,649; opposition, 74,008; Democratic majority, 16,641.

**CAPE COLONY AND BRITISH SOUTH AFRICA.** The Cape of Good Hope is a British Colony at the southern extremity of the Continent of Africa. It was first settled by the Dutch, and passed into the possession of Great Britain during the Napoleonic wars. It has had a responsible government since 1872. The Parliament consists of a Legislative Council of 21 and a House of Assembly of 68 members, both elected by voters qualified by a certain amount of income. The Governor is Sir Hercules G. R. Robinson, appointed in 1880. The Prime Minister is T. C. Scanlen, as Sir John C. Molteno, who formed a ministry in which the Dutch land-owners of the western districts were fully represented after the defeat of Gordon Sprigg and the British party, has retired from office.

**AREA AND POPULATION.**—The area and population have been more than doubled by the annexation of British Caffraria, in 1866; Basutoland, in 1868 (area 7,000 square miles, population 127,000); the Transkei, or Caffreland proper (area 17,000 square miles, popu-

lation 475,000), between 1875 and 1880; Griqualand West, in 1876 (area 17,800 square miles, population 45,277); and the Transgariep or Damara and Namaqua Lands, in 1880 (area 200,000 square miles, population 200,000). The administration of the native districts is not successful. The whole of South Africa is kept in a disturbed condition by the encroachments of the rival white races upon the blacks, and the resistance of the vigorous Caffre race. The situation is complicated by the jealousy between the Boers and the English, and their intrigues with the Caffre tribes. The area of Cape Colony proper is 199,950 square miles. The population, according to the census of 1875, was 720,984. The 236,793 whites (123,910 males and 112,873 females) consist mostly of the descendants of the original Dutch, German, and French settlers; the English settlers and authorities being greatly in the minority. The native population comprises, besides the Hottentots and Caffres, a considerable number of colonized Malay laborers, and the offspring of Dutch fathers and black women, who are commonly called Africaners.

**COMMERCE.**—Wool is the principal product, constituting nine tenths of the total exports. There are many large sheep-farms, ranging from 3,000 to 15,000 acres. The exports of wool in 1880 amounted to 42,226,044 pounds. Ostrich-feathers were exported of the value of £958,254, copper-ore of the value of £301,585, and sheep-skins of the value of £238,102. Diamonds are a very important article of export, but most of the trade is through secret channels. The total exports were returned for 1880 as £4,340,017, the imports as £7,643,863. The trade is mainly with Great Britain. There were 692,514 cattle and 9,836,065 sheep in the colony at the end of 1875. On January 1, 1882, the mileage of railroads was 961, and of telegraphs 3,575 miles. To the harbor improvements of Table Bay, at Cape Town, a graving-dock has been added, and a new outer harbor is to be constructed by extending the breakwater 1,800 feet, and building projecting moles to inclose a large area of deep water. The existing basins were completed a year after the Suez Canal. Instead of shipping deserting the port, the tonnage in 1881 was four and a half times as great as before the canal was opened. A fever of speculation in diamond shares led to a crisis in 1881, and ostrich-farming declined from over-production; but the country is generally prosperous and commercial interests are expanding.

**FINANCES.**—Public finances are in a flourishing condition. The revenue of 1881-'82 amounted to £3,492,396, being £524,196 beyond the estimate. The revenue for 1882-'83 is estimated at £3,572,110, and the expenditures at £3,530,118. Out of the surplus receipts a temporary loan obtained to meet the Basuto war expenses, and a claim of the Im-

perial Government on account of the Caffre war of 1878, were discharged.

**NATAL.**—Natal, on the east coast, was constituted as a separate colony in 1856. The colony has an estimated area of 21,150 square miles. The population in 1881 numbered 406,625, comprising 25,271 persons of European descent, 362,477 blacks, and 18,877 coolies. The chief product is wool, which is exported to Great Britain to the value of £500,000 annually. Cotton-raising commenced in 1866, but the exportation of raw cotton has entirely ceased. Sugar is also grown. The exports to Great Britain in 1880 were returned as £615,029, and the imports from that country as £1,651,706. Many of the exports, particularly wool, come from the Dutch republics, which absorb over one third of the imports. There is no trade of any account, except with Great Britain. A railroad 105 miles in length, which was authorized in 1875, has been completed. The company received a land grant of 2,500,000 acres, the right to certain coal-beds, and an annual subvention of £40,000, which is  $3\frac{1}{2}$  per cent on the cost. The construction of 118 miles more has been authorized. The revenue in 1880 was £582,715, and the expenditure £477,100. There is a public debt which amounted in 1881 to £1,631,700, on which 6 per cent interest is paid. About one fourth of the revenue is derived from customs and the rest from various sources, including the hut-tax of 14s. collected from the natives, which was paid on 85,714 huts in 1878.

**PUBLIC AFFAIRS.**—The abandonment of the South African policy of the Beaconsfield administration, upon the accession of the Liberal ministry in Great Britain, caused the complexion of politics at the Cape to change. The Tories adopted the scheme of building up a South African confederation, which the Dutch Republics were constrained to enter. It was first necessary to thoroughly subjugate the native races. This part of the scheme pleased all the whites. The British party were in the ascendant at the Cape. The Gladstone administration proposes to leave the Cape Colonists to settle all difficulties which arise between them and their neighbors, white and black. The former policy not only fanned the cupidity of the whites and stirred up native wars all along the border, but brought the whole Boer population into a dangerous state of disaffection. The country is gradually becoming quiet under the policy of non-interference. The Dutch yeomen of the older settlements have asserted their preponderance. The Cape Parliament has passed a resolution allowing the Dutch language to be spoken in debates, but the Boer representatives continue to use English. The English colonists of the eastern districts, coveting the lands of the peaceable and industrious Basutos, passed a disarmament act through the Legislature, and attempted to conquer their country as a penalty

for non-compliance (see "Annual Cyclopædia" for 1881). The colonists soon tired of carrying on a Caffre war at their own cost. The Dutch colonists of the west had nothing to gain from the war, and when the Imperial Government announced that there should be no confiscation of lands, the peace party became strong enough to repeal the disarmament act and proclamation. The arbitration of terms with the Basuto chiefs was left to Sir Hercules Robinson. The majority of the Basuto nation agreed to pay a large fine in cattle, and accept a protectorate and the imposition of a small hut-tax. Masupha and certain other chiefs refused to accept terms after their successful defense. The famous Colonel Gordon was commissioned to arrange the disputes. When he was on the eve of a satisfactory settlement the chiefs broke off negotiations on account of an act of the Cape Legislature, and Gordon resigned.

The Basuto question is far from being settled. A precarious peace has been kept up by playing off the different chiefs against each other. Leshuburn was threatened by Lethorodi that, if he did not pay his hut-tax to the Government, he should be "eaten up." Masupha threatened the same treatment to Lethorodi if he did not pay the tax. The administration of Basutoland costs £10,000 a year, which must be paid out of the Cape revenue unless local taxes can be collected. The difficulties are augmented by the squatting of Dutch and English settlers in the land. The scheme has been broached of providing lands for the loyal natives elsewhere, and leaving the rest to themselves. New complications with the native races have been prepared by an irruption of Dutch squatters into Tembuland in defiance of the land regulations set up by the Cape Government. In West Griqualand, Mankoroane and Montsioa, two chiefs who aided the British in the war in the Transvaal, have been at war, the latter with Moshette and the former with Massouw, who are befriended by the Transvaal Boers. Boer recruits enlisted with these chiefs, and expeditions were organized on Transvaal territory, while British filibusters joined the other side, and arms were supplied from Barkly. General Joubert stationed guards on the Transvaal frontier to prevent violations of neutrality, but Massouw and Moshette were not hindered from retreating when defeated and from driving captured cattle into the Transvaal. The Transvaal Government represented that the adjustment of the unsatisfactory boundary-line drawn by the commission so as to include the territories of Moshette and Massouw in the Transvaal, would end the disturbances. British freebooters and certain of the Caffre tribes of the Transvaal who refuse to pay taxes are endeavoring to provoke conflicts, with the object of securing the reannexation of the Transvaal, but the present British Government will rebuke such an agitation. There is no disposi-



tion to interfere in the native affairs of the Transvaal, but the resettlement of the boundaries which the Boers say they accepted on compulsion, is an open question.

**CETEWAYO'S RESTORATION.**—The Zooloo question affects more particularly the colony of Natal. After the capture of Cetewayo, or Ketchwayo, Zoolooland was apportioned among thirteen chiefs. One of these was John Dunn, Cetewayo's treacherous Irish lieutenant, who was appointed British Resident, but afterward replaced by a more respectable representative. The country, which is about half the size of Natal, was left in a state of famine by the war and the subsequent confiscation of the King's treasury, which consisted of all the cattle in Zoolooland, its only wealth. Three of the appointed chiefs, John Dunn, Hamu or Oham, the King's brother, and Zibebu, proved cruel tyrants and robbers, who pillaged and killed the other tribes. The rest of the Zooloo nation, including eight of the appointed chiefs, pined incessantly for their captive monarch, to whom they were attached with the fervor of the negro nature. The intimidations of the three ambitious tyrants, the machinations of Natal politicians and lying interpreters, long prevented the pathetic appeals of the Zooloos for "their bone," as they figuratively designate their King, from coming to the ears of the imperial authorities. Bishop Colenso, of Natal, was the only advocate of the Zooloos. The eyes of Lord Kimberly, the Colonial Secretary, were gradually opened to the true state of affairs. The rights of responsible government had been offered to the people of Natal, if they would conduct their own frontier defenses, but the boon on these conditions was refused. The British Government, after long hesitation, concluded that the restoration of Cetewayo would be the best guarantee of order and peace. The Natal settlers protested clamorously. Previous to his restoration the savage monarch was taken to England to view the majesty and power of the British nation. He passed the month of August in London, and was then conveyed back to Cape Colony with the intention of reinstating him in his kingdom as soon as the difficulties could be arranged. He is to be subjected to conditions similar to those which were imposed upon the thirteen chiefs. He is prohibited from reviving his army. A British resident will remain in the country. The chiefs and people who will not accept Cetewayo's rule will have separate lands allotted to them.



CETEWAYO.

The entire European population of Natal is less than 30,000, while the natives within the borders are ten times as numerous. The proposition that the colony should undertake the management of its own affairs and the responsibility of its defenses came originally from the colonists themselves. The intended restoration of Cetewayo produced a great agitation in the town of Durban, and was the cause of their refusing the independence which they had recently sought. The head of the government of Natal is Sir Henry Bulwer, who was Lieutenant-Governor before the coming of Sir Bartle Frere and the inauguration of the policy which brought discord and confusion in South Africa to a climax, and provoked internecine struggles in the embattled field between all three races. The dispatches of Sir Henry Bulwer, during his former incumbency, bear witness to the fact that Cetewayo neither intended nor committed any acts of hostility toward the colonists of Natal.

**COMMERCIAL DEVELOPMENT.**—Railroad construction is proceeding gradually, and the lines opened return a profit of  $3\frac{1}{2}$  per cent. Of agricultural progress there are few signs. The Transvaal Boers export wool and hides, besides copper, and a little gold and ivory, but the staple exports of the English possessions are diamonds and ostrich-feathers. The increased trade of Cape Town and Port Elizabeth has stimulated enterprise. The improvements in Table Bay Harbor render the port of Cape Town safe and commodious.

**CEREAL PRODUCTION OF THE UNITED STATES.** The cereal production, according to the census of 1880, is reported, at great length, for the counties of each State and Territory. A summary of this report, by States and Territories, is given in the following table:

STATES AND TERRITORIES.	Barley.	Buckwheat.	Indian corn.	Oats.	Rye.	Wheat.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Alabama.....	5,281	363	25,481,278	3,089,689	28,402	1,522,657
Arizona.....	289,051	.....	34,746	664	.....	136,427
Arkansas.....	1,952	548	24,156,417	2,219,822	22,387	1,269,750
California.....	12,579,561	22,807	1,993,325	1,841,271	181,681	29,017,707
Colorado.....	107,116	110	455,968	640,900	19,465	1,425,014
Connecticut.....	12,286	137,563	1,880,421	1,009,706	370,738	88,742
Dakota.....	277,424	2,521	2,000,864	2,217,182	24,859	2,880,289
Delaware.....	523	5,857	3,894,264	878,508	5,958	1,175,272
District of Columbia.....	.....	.....	29,750	7,440	3,704	6,402
Florida.....	210	.....	3,174,234	468,112	2,965	422
Georgia.....	18,662	402	28,202,018	5,548,748	101,716	3,159,771
Idaho.....	274,750	.....	16,408	462,236	4,341	540,589
Illinois.....	1,229,523	178,859	325,792,481	63,189,200	3,121,785	51,110,502
Indiana.....	882,585	89,707	115,482,300	15,599,518	803,105	47,284,583
Iowa.....	4,022,538	166,895	275,024,247	50,610,591	1,618,605	81,154,205
Kansas.....	300,273	24,421	105,729,325	8,180,835	413,181	17,324,141
Kentucky.....	450,326	9,942	72,852,169	4,580,788	668,050	11,386,113
Louisiana.....	.....	.....	9,906,139	329,540	1,013	5,694
Maine.....	242,185	892,701	960,638	2,265,575	26,398	665,714
Maryland.....	6,097	136,667	15,968,538	1,794,573	288,067	3,004,864
Massachusetts.....	80,123	67,117	1,797,598	645,159	218,716	15,763
Michigan.....	1,204,316	413,062	32,461,452	18,190,708	294,918	35,532,543
Minnesota.....	2,972,965	41,756	14,881,741	23,882,125	215,245	34,601,030
Mississippi.....	848	.....	21,340,800	1,959,620	5,134	218,890
Missouri.....	123,031	57,640	202,485,728	20,670,958	530,426	24,966,627
Montana.....	39,970	437	5,649	900,915	430	469,688
Nebraska.....	1,744,536	17,562	65,480,135	6,555,575	424,345	13,847,007
Nevada.....	513,470	.....	12,891	186,860	.....	69,298
New Hampshire.....	77,877	94,090	1,350,248	1,017,620	34,638	169,316
New Jersey.....	4,091	466,414	11,150,705	3,710,573	949,064	1,901,739
New Mexico.....	50,053	.....	683,756	156,527	240	706,641
New York.....	7,792,062	4,461,200	25,875,450	37,575,506	2,684,690	11,587,766
North Carolina.....	2,421	44,668	28,019,589	3,598,068	285,160	3,397,398
Ohio.....	1,707,129	280,229	111,877,124	28,664,505	889,321	46,014,869
Oregon.....	920,977	6,215	126,864	4,385,650	13,605	7,480,010
Pennsylvania.....	433,100	3,593,326	45,821,531	38,841,489	3,683,621	19,462,405
Rhode Island.....	17,733	1,254	872,967	159,389	12,997	240
South Carolina.....	16,257	.....	11,767,099	2,715,505	27,049	962,358
Tennessee.....	80,019	33,434	62,764,429	4,722,190	156,419	7,331,338
Texas.....	72,736	535	29,065,172	4,593,355	25,399	2,567,760
Utah.....	217,140	.....	163,242	418,082	9,605	1,169,199
Vermont.....	267,625	856,618	2,014,271	3,742,282	71,738	387,257
Virginia.....	14,229	136,004	29,106,661	5,383,181	824,431	7,822,504
Washington.....	566,537	2,498	39,163	1,371,706	7,124	1,921,322
West Virginia.....	9,740	285,298	14,090,609	1,908,505	113,181	4,001,711
Wisconsin.....	5,043,113	299,107	34,230,579	32,905,320	2,295,513	24,854,689
Wyoming.....	.....	.....	.....	22,512	73	4,674
United States.....	44,113,495	11,817,327	1,734,861,535	407,858,999	19,581,595	459,479,505

The number of acres under cultivation is as follows: Barley, 1,997,717; buckwheat, 848,389; Indian corn, 62,368,869; oats, 16,144,593; rye, 1,842,303; and wheat, 35,430,052.

**CHEMISTRY.** The tendency of recent chemical progress, according to Professor Liveing, President of the Chemical Section of the British Association for 1882, has been toward placing the dynamics of the science on a satisfactory basis, and toward rendering an account of the various phenomena of chemical action on the mechanical principles acknowledged to be true in other branches of physics. The most recent work has not been marked by any brilliant discoveries, or by the application of any startling novelties in processes, but has been rather distinguished by efforts to correct and perfect discoveries already made, to confirm advances already attained, to simplify and facilitate the application of principles already wrought out to industrial, economic, and other practical or beneficial purposes. To these categories belong the work in the redetermination and verification of the atomic weights, in which some of our American chemists have played an important part; the progressive improvements that are made

in industrial and manufacturing chemistry, the patient work that is done in physiological chemistry, and the persistent zeal with which all problems that have a bearing on the security of life and health are followed up.

**NEW SUBSTANCES.**—The leaf and wood of the California bay-tree, or laurel (*Umbellularia*, or *Laurus Californica*), a tree the wood of which is much used for veneering and fine cabinet-work—have a very fragrant, aromatic odor, which, when strong, as in the crushed leaf, excites the mucous surfaces, brings tears to the eyes, and produces headache. Mr. J. M. Stillman, of the University of California, has obtained from the leaves, by distilling them with steam, an oil of a clear yellowish or straw color, of the peculiar aromatic odor of the leaf, having a specific gravity at 11° C. of 0.94, which has not thickened after standing for nearly a year. Subjected to fractional distillation it gives up a small quantity of dissolved water, and separates into two principal fractions, one boiling at from 170° to 190° C., and the other at from 210° to 225°, with smaller quantities which pass over at the higher temperature of 260°. The lower fraction mentioned was subjected to repeated fractional



distillation, and gave a considerable quantity of a clear, colorless, mobile liquid, boiling at from 167° to 168° C., though apparently with slight dissociation. A part of the purest of this substance showed, under elementary analysis, a composition corresponding with the formula  $C_{20}H_{32}H_2O$ , agreeing with the composition of terpinol. The compound has an odor not quite identical with that of spirits of camphor, is not readily affected by metallic sodium, even when heated with it, and gives off a vapor of a density calculated at 4.7. The higher fraction (that boiling at from 210° to 225°), when subjected to fractional distillation, gave off a colorless, mobile liquid of aromatic but powerful odor, which boils without decomposition at from 215° to 216°; gives, with sulphuric acid, a blood-red color, turning to brown and black; forms with sodium a blood-red, brittle, resinous substance, and is acted on violently and decomposed by strong nitric acid. Its vapor density is 4.39, and its composition is expressed by the formula  $C_8H_{12}O$ . This substance is isomeric, so far as Mr. Stillman knows, with no other known compound. It is homologous, so far as its empirical formula is concerned, with common camphor, but has different properties.

Messrs. J. M. Stillman and E. C. O'Neill have examined and described a new fat acid from the nut of the California bay-tree (*Umbellularia Californica*). The nuts, when ground and extracted, yielded a content of 59 per cent of the crude fat, which solidified on cooling to a hard, tallowy mass, nearly white, having a specific gravity of 0.925 in the melted condition at 88° Fahr., its melting-point. It is disagreeable in taste, and produces irritation in the throat. When saponified and treated with hydrochloric acid the fat yielded an oily acid layer, which the analysts regard as composed chiefly of a new acid, of the acetic acid series, to which they have given the name, derived from the accepted name of the tree, of *umbellulic acid*. With it there seems to be also present a certain quantity of some higher acid, and possibly a small quantity of some lower acid. Umbellulic acid, the composition of which is expressed by the formula  $C_{11}H_{21}(C_2H_5)_2O_2$ , is a white, crystalline substance of a peculiar taste, which does not appear to be derived from mere impurities, and irritates the mucous membrane of the throat. It distills at the ordinary atmospheric pressure without decomposition, giving a water-clear distillate that becomes, on cooling, a white, crystalline solid. Its melting-point appears to be from 21° to 23° C. (70° to 73½° Fahr.), and its boiling-point from 275° to 280° C. (527° to 536° Fahr.). The results of the analysis are the more remarkable inasmuch as they are not in accordance with the general theory that the natural fats contain only acids with an even number of carbon atoms in the molecule.

Mr. Malvern W. Iles has described a new manganese mineral, which has been found in

Hall Valley, Park County, Colorado. It is a hydrous sulphate of the Epsomite group, and is composed of five equivalents of the sulphate of manganese, with one each of the sulphates of iron and zinc. It is described as composed of loosely adhering, very friable, thick orthorhombic prisms, which are frequently found terminating in truncated pyramids, with a slightly glimmering luster, somewhat resembling pure kaolin, and a number of effervescent salts, of a pure milky-white color, but sometimes stained with sesquioxide of iron, as having a bitter, astringent taste, and as being very readily soluble even in cold water. The aqueous solution effervesces with sodium carbonate, and reddens blue litmus-paper. Its hardness is from .75 to 1, and its specific gravity is 2.167.

Professor F. W. Clark and N. W. Perry describe a new mineral from near Gunnison, Col., for which they propose, if it should prove to be a new species, the name of *gunnisonite*. It is massive, easily scratched by the knife, and has a deep purple color, the tint of which is retained in the powder. At first sight it suggested ytrocrite, and this led to its examination for fluorine. The new mineral is associated with a semi-massive calcite, which in portions is tinged with ferric oxide, and with which it is so interpenetrated that it could not be completely separated mechanically. Its specific gravity is 2.85. The analysis, making allowance for the intermixed calcite, gave for the composition of the mineral nearly the formula  $7 CaO, 2 Al_2O_3, 4 SiO_2, 32 CaF_2$ . An analysis of purer material might give the simpler ratio of four equivalents of the silicate to sixteen of the fluoride.

M. E. Grimaux, having effected a transformation of morphine into codeine, has since succeeded in obtaining a new series of bases from the latter substance. By treating codeine or the sodium derivative of morphine with methyl iodide, he obtained the iodomethylate of codeine, a substance possessing the properties of a quaternary iodide of ammonium. This, treated with silver oxide, is transformed into a solid and crystallizable tertiary base, slightly soluble in water and easily soluble in alcohol and ether, which crystallizes in needles fusing at 118.5° C. The new base appears to be formed by the abstraction of a molecule of water from the quaternary hydrate of ammonium, and to constitute methocodeine,  $C_{18}H_{26}NO_2(OCH_3)$ , an isomer of codethyline,  $C_{17}H_{18}NO_2(OC_2H_5)$ . The substance was also obtained by boiling iodomethylate of codeine with an aqueous solution of potash, but the yield was less than when silver oxide was used. When silver oxide and potash are both used, another tertiary crystallizable base fusing at 132°, and resembling methocodeine, but less soluble in ether, is obtained. This base has not been analyzed as yet, but is probably methocodethyline,  $C_{18}H_{21}NO_2(OC_2H_5)$ . We have here, then, a general reaction by means of which can be obtained homologues of codeine containing new

alcohol groups, not in the phenol hydroxyl of the morphine, but in the hydrocarbon radical of the morphine itself.

M. A. Muntz has obtained, by treating the meal of lucerne with water containing a little neutral acetate of lead, the gum-galactine, a distinct substance which is characterized by its high dextro-gyrate rotatory power, and the property of reducing, under the influence of diluted acids, the sugar of milk. It occurs abundantly in vegetable products, and is found in large quantities in leguminous seeds, particularly in those which do not contain amidon. It is digested by animals, but has not been saccharified experimentally. M. Muntz suggests that the remarkable property of this body of giving rise to galactine permits it to be regarded as forming a part of the materials from which the females of herbivorous animals derive the elements of the sugar of milk that is secreted by their organs of lactation, the origin of which is still involved in mystery. Sugar of milk is of rare occurrence in the vegetable kingdom, and has been detected with certainty only by M. G. Benchardat, in the juice of the sapota.

Dr. T. L. Phipson has described a new coloring-matter, *ruberine*, which he has extracted from the *Agaricus ruber*, a poisonous fungus, and which possesses interesting optical and chemical qualities. It is of a beautiful rose-red color, very similar to that of palmerine; when seen by transmitted light it presents a very vivid blue fluorescence; and it gives in its spectrum two wide and dark absorption-bands in the green. Ruberine is soluble in water and alcohol, in solutions that are rose-red by transmission and blue by reflection. Dr. Phipson imperfectly isolated the alkaloid from the *Agaricus ruber*, which he calls *agaracine*, in the form of a white or yellowish-white amorphous substance, somewhat greasy in aspect, with a distinctly bitter taste, followed by a burning sensation on the tongue and a slight odor of its own kind, easily fusible into pale-yellow globules, and volatile with an odor recalling that of quinoine. It dissolves in alcohol and ether, and slowly but completely in dilute hydrochloric acid. Observing that air transforms the alkaloid into the red coloring-matter, Dr. Phipson concludes that the coloring-matter in the plant is formed from the alkaloid at those points of the fungus that are at the same time in contact with the air and the solar rays—which is where it is most conspicuous. Both plants belong to the aromatic series. As ruberine is very easily soluble in water, it sometimes happens that heavy rains wash it out of the head of the fungus, and give the plant a peculiar bleached appearance.

A new carbon sulphobromide has been obtained by mixing bromine and carbon disulphide, allowing them to settle, distilling off the excess of carbon disulphide, and crystallizing the brownish oily residue under the action of water. It is carbon trisulpho-hexa-bromide

(C<sub>3</sub>S<sub>3</sub>Br<sub>6</sub>), and has the form of small bright prismatic crystals or rhombic plates, fuses at 125° to a red liquid, and solidifies unchanged on cooling. At higher temperatures it decomposes, evolving brown-red condensable fumes, and leaving a coal. When pure is has no odor or taste. It is insoluble in water, and hardly soluble in cold ether, alcohol, and glacial acetic acid.

Mr. Charles Upham Shepard has described two new minerals found in the Tertiary limestone of the Twin Islands, Mona and Moneta, near Porto Rico, West Indies. They have been formed by percolation of water from the superficial beds of guano into the limestone lying under them, and are named *monetite* and *monite*. Monetite occurs in a highly crystalline form, and is described as a crystalline dialcic hydriphosphate, or dialcic-ortho-phosphate differing from that artificially prepared in not containing water of crystallization. Monite is a hydrated tricalcic phosphate, and resembles in color and density the more friable varieties of kaolinite. In the same islands was found a pyroclastic, which may be a uniform compound of monetite and monite, or only a mechanical mixture of the two, and is "eminently prone to admixture with gypsum, aluminum and iron phosphates, silica, and organic matter."

Anhydrous crystalline hæmatein is obtained by treatment of the ammonio-compound of hæmatein with strong acetic acid, in microscopic rhombic plates, solvable in water, alcohol, ether, acetic acid, and alkalies. The composition of the crystals is represented by the formula, C<sub>18</sub>H<sub>12</sub>O<sub>4</sub>. By treating hæmatein with cold concentrated sulphuric acid, and adding acetic acid, Messrs. J. J. Hummel and A. G. Perkin have obtained an orange-colored powder composed of microscopic prismatic crystals of acid isohæmatein sulphate. It is insoluble in alcohol, ether, and benzole, but soluble in ammonia and sulphur solutions, and to a small extent in acetic acid. Isohæmatein chlorhydrin is produced, by heating hæmatein in sealed tubes with hydrochloric acid, in microscopic red needles. It dissolves easily in water, is less soluble in alcohol, and gives a reddish violet solution with alcoholic potash. It is converted by concentrated sulphuric acid into isohæmatein sulphate. With hydrobromic acid, hæmatein gives isohæmatein monobromhydrin. By treating either of the last two substances with argentic hydrate, isohæmatein, isomeric with hæmatein, is obtained.

Crystalline brazilin is obtained from Brazil-wood extract in the same manner that hæmatein is obtained from logwood extract. It forms thin microscopic reddish-brown rhombic plates, very slightly soluble in cold water, more so in hot, and soluble in alkalies. The formula of its composition is C<sub>16</sub>H<sub>12</sub>O<sub>4</sub>H<sub>2</sub>O. With sulphuric acid it gives acid isobrazilin sulphate, with hydrochloric acid isobrazilin chlorhydrin, and with hydrobromic acid the corresponding bromine compound. The tinctorial power of the



new compounds is much greater than that of the original hæmatin and brazilein, and the colors are much faster.

Prof. F. W. Clarke and Mary E. Owens have obtained a number of new substances from the action of potassium cyanate upon the compounds of platinum. With platinum tetrachloride they obtained a buff-yellow precipitate soluble in water, but completely insoluble in alcohol, the aqueous solution of which decomposes on boiling, and to which analysis gave the novel formula,  $K_2PtCl_2(CNO)H_2O$ . With the green salt of Magnus,  $PtN_2H_4Cl_2$ , new compounds were formed, apparently of great complexity. The hot aqueous solution, concentrated to the crystallizing point, deposited pale-yellow needles, containing potassium, ammonia, water, and carbon, with 43.93 per cent of platinum. From the mother-liquor beautiful brown crystals were obtained, in which were found ammonia, platinum, and chlorine. Strychnia chloro-platinate with potassium sulpho-cyanate gave a blood-red solution which, after cooling, deposited a brilliant red crystalline precipitate,  $2(C_{21}H_{22}N_2O_2)H_2PtO_4S_8$ —the strychnia salt analogous to the potassium sulpho-cyanoplatinate.

Ogier has obtained a new oxychloride of sulphur by heating to  $250^\circ$  in sealed tubes a mixture of equal weights of  $S_2Cl_2$  and  $SO_2Cl_2$ . Its composition is expressed by the formula  $(S_2OCl_4)_2 + SO_2 + S$ . It is a dark-red liquid of density 1.656, and of a repulsive odor, recalling that of sulphur chloride, and is decomposed by water and by heat of  $100^\circ$ .

ATOMIC WEIGHTS.—Mr. James Blake, of Calistoga, Cal., has determined the atomic weight of beryllium and its true position among the elements, by the application of the rule that the intensity of the action of different substances upon organisms increases with their atomic weight. Introducing the salts of beryllium to the blood of living animals, he found that the reactions caused by them were the same as those caused by the salts of alumina and ferric oxide, and strikingly different from those caused by the salts of the magnesium group. The metal is therefore placed in the aluminum group; and this determines its atomic weight as 13.65, and the formula for its oxide  $Be_2O_3$ , in accordance with the determinations of Nilson and Pettersson. Roscoe has redetermined the atomic weight of carbon by the method employed by Dumas and Stas, which consists in the direct combustion of the diamond. The mean of six separate experiments, taking the atomic weight of oxygen as 15.96, was 11.9708.

NEW PROCESSES.—The tests for the detection of oleomargarine and of impurities in butter depend upon chemical analysis and upon the determination of specific gravity. Two processes of chemical analysis by saponifying the fat of the butter are used at the Municipal Laboratory in Paris. In the first process, the clear fat saponified with potassic hydrate (three

or four grammes of fat to one or two grammes of hydrate) is mixed with 50 c.c. of alcohol, after which the soap, provided the solution formed is perfectly clear, is decomposed with weak sulphuric acid, and the insoluble fat-acids are collected and weighed. The quantity of fat-acids thus obtained is in butter usually 86.5 to 87.5 per cent, and sometimes as high as 88 per cent; in animal fats from tallow the percentage of insoluble fat-acids is  $95\frac{1}{2}$ . The difference—about 8 per cent—is attributed to the absence in tallow of volatile and soluble fat-acids which exist in butter. In the other process, the result is obtained volumetrically, by estimating the quantity of potassa used in saponifying the fat. One gramme of butter requires from 225 to 232.4 c.c. of potassa solution, while one gramme of tallow or other fat of the same nature requires from 195 to 197 c.c. of the same potassa solution. M. Charles Girard, of the Municipal Laboratory, considers as adulterated any butter requiring, for saponification, less than 221.5 c.c. of the potassa solution.

The test by determination of the specific gravity, as employed by Messrs. Leune and Harburet, consists in placing the clear melted fat in a cylinder heated by the vapor escaping from a boiling water-bath, but no part of which is in the boiling water. By heating in this way, the temperature of the melted fat is kept at about  $93^\circ C$ , or about  $199^\circ$  Fahr. To determine the density of this fat, an areometer is placed in it, so graduated that in butter it will sink to the lowest mark of the scale, while in oleomargarine it will stand at the highest point. The intervening space in the scale is divided into ten equal parts, each one of which corresponds to one tenth of oleomargarine mixed with butter. This instrument is relied upon to give correct results to within ten per cent. Mr. P. Casamajor, from the results of his experiments to ascertain the actual specific gravity of the two substances, has derived another very simple test with alcohol. It consists in finding the grade of alcohol in which the substance will remain at equilibrium in whatever part of the liquid it is placed. Mr. Casamajor found that this was, for butter, alcohol of 53.7 per cent; for oleomargarine, of 59.2 per cent, at  $15^\circ C$ , or  $59^\circ$  Fahr. The fat may be melted in a little spoon or scoop and dropped upon the alcohol, care being taken to have the drop free from air-bubbles. If alcohol at  $56\frac{1}{2}$  per cent—the medium between the two grades specified above—is taken, a globule of melted butter will sink in it to the bottom, while a globule of oleomargarine will remain at the top, both being still warm and liquid. Afterward, if the alcohol is raised to about  $30^\circ C$ , or  $86^\circ$  Fahr., the butter will become solid, while the oleomargarine may still remain liquid. Then the butter will rise to the top of the alcohol. If the alcohol is then kept for a few minutes at  $15^\circ C$ , the oleomargarine will become opaque and remain at the top,

while the solid globule of butter will sink to the bottom. If we use alcohol of 59 per cent, oleomargarine will remain on top, and butter will sink to the bottom, at all temperatures above 15° C. At 15° C. oleomargarine will remain in equilibrium in any portion of the liquid in which it is placed. Since oleomargarine is seldom sold pure, but is mixed with true butter to improve its taste and appearance, it may be practically most convenient to use alcohol of 55 per cent and consider as oleomargarine any so-called butter that will not sink to the bottom in it at 15° C. or 59° Fahr.

The theory has sometimes been set up in cases where arsenical poisoning is suspected, that the arsenic found in the subject may have been absorbed from bismuth taken for medicinal purposes. In view of this fact, Messrs. R. H. Chittenden and S. W. Lambert, of the Sheffield Laboratory, Yale College, have made experiments for the purpose of ascertaining the purity of bismuth subnitrate as regards arsenical poison, and whether, if arsenic is present, the poison taken in repeated doses of the bismuth is absorbed by the different organs and tissues of the body. Out of fourteen different samples of subnitrate of bismuth analyzed, only one was found to be absolutely free from arsenic, while the average content of arsenic in the samples examined was .013 per cent, or 13 milligrammes of arsenious oxide in 100 grammes of bismuth. This amount is equivalent to two tenths of a grain of arsenious oxide. Of one of the specimens 100 grammes contained 77 milligrammes, or 1.2 grain of arsenious oxide, or half a fatal dose of the poison. Although arsenic is known not to be an accumulative poison, but to be gradually eliminated from the healthy body when very small quantities are taken at periods somewhat remote from each other, there was still no evidence to show that even such small quantities as were present in the samples of bismuth might not be absorbed and give rise to an appreciable accumulation of the poison. In order to ascertain exactly to how great an extent it is absorbed and retained when arsenical bismuth is taken, a given quantity of bismuth subnitrate was administered to a large and healthy dog three times daily with his food, in increasing doses. This was continued for five weeks, when the dog was killed, twenty-four hours after the last dose was given. During the whole time he had taken a little more than a grain of arsenious oxide, and 2.38 milligrammes per day during the last three weeks. He was apparently unaffected by the bismuth. Only .00116 gramme of metallic arsenic was found in the stomach and intestines, with unweighable mirrors or minute stains in the other organs, and but little absorbed bismuth. It is concluded from these results that the greater part of the arsenic taken was not absorbed. The amount found in the alimentary canal was only one half the amount contained in the last three doses of bismuth taken, a portion of which remained in

the alimentary canal at the time of death. This, then, was not absorbed arsenic, but simply the amount contained in the bismuth still remaining in the alimentary canal. The unweighable mirrors found in the liver, brain, and blood were, however, evidence of slight absorption. The non-absorption of arsenic is probably dependent upon the form in which it exists in the bismuth—that is, upon its insolubility. The conclusion is drawn from the experiments that, while medicinal bismuth subnitrate contains a weighable quantity of arsenic, the poison was not present in the specimens experimented with, in a form capable of being readily absorbed into the system. This fact, however, does not diminish the need of a preparation of bismuth entirely free from arsenic.

M. Goppelsroeder has invented a method of what might be called dyeing by electricity, or of forming dye-stuffs by electrolysis. His process depends upon the decomposition of water in the galvanic battery, and upon the fact that coloring-matters may be produced by the oxidation of some substances and the deoxidation of others. To produce his dyes he dissolves organic matters, chiefly coal-tar products, which produce dyes by either action, in the acidulated water which is to be decomposed by the battery. As the same substance may sometimes give one color by oxidation and another by deoxidation, he separates the poles within the acidulated bath by interposing porous earthenware between them. The battery being put in action, the coloring substances which are derived by oxidation are produced in the oxygen end of the bath, those derived by reduction in the hydrogen end. With this process he has successfully produced aniline-black, different aniline-blues, Hoffmann's violet, artificial alizarine, etc.; and he exhibited at the Paris Exposition some fabrics beautifully colored with the dyes thus formed.

MM. Latour and Dubreuil have described a new process for extracting sulphur. The method commonly employed in Sicily is by roasting the mineral by piling it into tower-like heaps, and making fires at the bottom. The sulphur melts and is collected, but only half of it is secured, for the rest is lost in the atmosphere as sulphurous and sulphuric acids. The process can be carried on only during a part of the year, for the acid vapors destroy all vegetation during the growing season. The new method consists in throwing the mineral into boilers containing chloride of calcium. When the mixture is heated to 248°, the sulphur melts and sinks to the bottom of the boiler. As soon as the separation is completed the boiling liquid is poured off into another boiler, and is good to use again, without cooling. Extraction by this method secures nearly all of the sulphur, and can be carried on at all times, for it does not disengage any noxious gases.

M. E. Houdard has described a process and



apparatus for determining the sulphates contained in wines, by which as low a proportion as one half a gramme of sulphate per litre of wine can be ascertained. The process requires ten test-tubes placed in two parallel rows, five in each row; a pipette of 25 c.c. graduated in five divisions, each of 5 c.c.; a burette graduated in five divisions from 0.5 c.c. to 2.5 c.c., each division consequently containing 0.5 c.c. Five cubic centimetres of the wine to be tested are put into each of the test-tubes of the first row; Marty's standard liquid, 10 c.c. of which precipitate 0.1 gramme of potassium sulphate per litre, is then added, to the first tube 0.5 c.c., to the second 1.0 c.c., and so on, till the fifth tube receives 2.5 c.c. The contents of the five tubes are heated and filtered respectively into the five tubes of the second rank. It is then merely needful to add a drop of the standard liquid to each of the second set of tubes, and to notice in which tube it produces a faint turbidity. If, for instance, this turbidity appears in number 2 and not in number 3, it follows that the wine contains more than 2 grammes of potassium sulphate and less than 3 grammes.

Mr. Charles W. Folkard, in criticising the processes of analysis for the determination of organic matter in potable waters, notices, as a defect of them all, that since the products of the decomposition of the organic matter are the same as the normal constituents of rain, viz., carbonic acid, ammonia, and nitric acid, it is impossible to ascertain whether those substances were derived from contaminating bodies, or have been dissolved by the rain in falling. It is possible in the oxidation method to determine approximately the minimum amount of contamination which has taken place since the water was precipitated as rain, by deducting the average amount of nitrogen in water falling to the earth from the total amount found. But this affords no direct evidence as to the fitness of the water for dietetic purposes, because subsequent oxidation and fermentation may have rendered it to a great extent harmless. Regarding the subject in a biological aspect, the effect of mere dilution is hardly appreciable in disarming the germs of disease of their power. A single germ in a glass of water is competent to convey disease to a person sufficiently debilitated. It would be impossible to banish zymotic disease from towns the water of which contains the dejecta of persons suffering from the disease, even though in the most minute quantity. The very feeble would contract the complaint from the water, and from them it would spread to the robust around them. These germs are endowed with a most persistent vitality, and it appears that once-contaminated water is unsuited for dietetic purposes. Irrigation, chemical treatment, and filtration are alike powerless to effect a real purification of sewer-contaminated water. The only way to ascertain if a sample of water is fit for drinking pur-

poses is, in Mr. Folkard's opinion, to trace it to its source and see that contaminating matter has been excluded from the time that the water fell as rain till it entered the reservoir or the engine-well.

Dr. Edmund W. Davy, of the Royal College of Surgeons, Ireland, has applied a new and expeditious test for the determination of nitrites in water, which is based upon the reaction of nitrous acid or a soluble nitrite on gallic acid. When an aqueous solution of the latter acid is brought in contact with a soluble nitrite, the mixture, unless the amount of the latter substance present be very small, will soon acquire a yellow or yellowish-brown tint that will increase in depth up to a certain point, after which the color remains permanent, while at the same time minute globules of gas make their appearance in the mixture. If the quantity of nitrite present is exceedingly small, the reaction at the ordinary temperature will take some days, but may be made almost immediate by heating to the boiling-point. The depth or intensity of the color produced being in direct proportion to the amount of nitrite reacting on the gallic acid, the quantitative determination of the nitrites may be conveniently effected by comparing the color produced with that given by a standard solution containing a known quantity of nitrite. With this test, Dr. Davy has detected an amount of nitrite in water equivalent to one part of nitrous acid in twenty million parts of water. He is not prepared to say how much more delicate it may be. He considers it almost, if not quite as delicate, as Griess's test, and more convenient in many respects. The nitrates do not produce the reaction described, and do not affect the test, unless they are present in large quantities.

IMPROVED APPARATUS.—C. R. Tichborne, F. R. S., describes a new form of apparatus for estimating ammonia in potable waters. It consists of a retort fitting air-tight into a fairly long-necked receiver, with an India-rubber stopper. To the receiver is attached a bent tube proceeding from its stopper and connecting it with two bulb-tubes of a special form, somewhat similar to a flat Liebig's potash bulb, but with two pear-shaped bulbs on each side to prevent regurgitation of the fluid, and three absorption-bulbs at the bottom, the center one of which is provided with a glass tap. The whole apparatus having been connected, and the two bulbs filled with water free from ammonia, the water to be examined is poured into the retort and distilled over gently. After the distillation is completed the most of the ammonia, if not all, will be found in the receiver, while any vapor which may have escaped will be found in the first, and any atmospheric ammonia which may have entered by regurgitation, in the second bulb-tube.

Cross and Bevan's new apparatus for determining melting-points consists of a small strip of thin sheet-iron, having a hole at one end to admit the bulb of the thermometer, fitting it

closely, and a small indentation near the other end. A glass float is also made and attached to a piece of platinum wire bent at right angles. To make an observation, a small quantity of the substance is melted in the indentation of the plate, and while still liquid the platinum wire of the float is placed in it and allowed to become fixed by cooling. The plate is then attached to the thermometer, and the whole is heated in mercury till the float is liberated by the melting of the substance. The thermometer tells the temperature.

Andrews has described a simplified form of the air-thermometer of Crafts for determining temperatures above 350°C. The thermometer part consists of a capillary tube bent twice at right angles, on one end of which is a bulb of about one centimetre capacity, and on the other end a wider tube about fifteen centimetres long. At the point where the tube widens is a point of black glass to serve as an index, and in the middle of the wide tube is a glass cock. To the end of this wide tube is attached a rubber tube with two branches, one of which goes to a closed manometer and the other to a rubber bag. The bag, the manometer, and the wide tube are filled with mercury. To make an observation, the rubber bag is compressed till the mercury rises to the black glass index and the height of the mercury column in the manometer is noted. The thermometer is then exposed to the temperature to be measured, the column is again adjusted, and the new height noted. From these data and the constants of the instrument the temperature may be calculated.

M. D'Arsonval has invented an apparatus for uninterruptedly preparing oxygen without the agency of heat. It is based upon the mutual decomposition of peroxide of hydrogen and chromic acid. The apparatus is composed of two flasks, one containing clippings of binoxide of barium, the other bichromate of potassium dissolved in hydrochloric acid in excess. The two flasks are connected by an India-rubber tube, which also conveys the stream of chromic solution to the binoxide of barium. The hydrochloric acid in excess in contact with the binoxide produces peroxide of hydrogen, which, in contact with chromic acid, decomposes and causes the chromic acid to decompose. Thus a stream of oxygen is generated by two distinct decompositions, and is easily regulated by controlling the flow of the liquid.

Tommasi has described a simple apparatus, which he calls a *dissocioscope*, for showing the dissociation of ammoniacal salts. It consists of a tube of glass in which is suspended a slip of blue litmus-paper, previously moistened with a solution, completely saturated, and exactly neutral, of ammonium chloride. If the tube be plunged into a cylinder containing boiling water, the ammonium salt is dissociated and the blue litmus-paper becomes red. On placing it in cold water the dissociated ammonia and hydrogen chloride reunite, and the

paper becomes blue again. This may be repeated any number of times at pleasure.

VEGETABLE CHEMISTRY.—Dr. E. Ray Lankester controverts the assumption that chlorophyll, under the influence of sunlight, has the property of decomposing carbonic acid. The action never takes place except when living protoplasm is present in intimate association with the chlorophyll, and Dr. Lankester adduces a number of facts to show that it is really due to the protoplasm. Among them is the fact that the rays absorbed by the chlorophyll are not the most efficient ones in promoting the decomposition, while light that has traversed a solution of chlorophyll is still competent to excite the chemical process in question. The action of light, on the other hand, on the chemical motion of protoplasm is known to be very important, in that it promotes oxidation and the decomposition and disruption of the protoplasmic parts of the cell; and Pringsheim has suggested that the true function of chlorophyll is by its general absorbent action on light to protect the protoplasm of the cell from excessive oxidation, and especially the protoplasm of the chlorophyll corpuscles; while the protoplasm of these corpuscles, under the influence of the rays of light that pass the chlorophyll, decomposes carbonic acid and synthesizes starch. Dr. Lankester regards this explanation as reconciling the difficulties in the question. The fact, moreover, that in the organic world generally, the more complex chemical processes connected with nutrition and secretion appear to be carried on directly under the influence of the living substance of the cells, renders it probable on *a priori* grounds that the living protoplasm is the active agent.

M. Léon Bontroux, of Caen, has deduced from the examination of the ferments in fruits some facts that are interesting, though hardly conclusive, respecting their origin. Using Pasteur's method for ascertaining whether a body is charged with ferments, he introduced the body, after employing all necessary precautions, into a wine-must deprived of germs, which was then raised to a temperature of 86°. The foreign organisms that were developed with the ferments were then eliminated by methodic cultivation. Certain green fruits, including black currants, gooseberries, raspberries, and barberries, seemed to bear peculiar alcoholic ferments normally on their surface. Other fruits—like strawberries, cherries, and currants—did not exhibit them; but the most active ferments, those which produce wine, appeared suddenly on the ripe fruits. Seeking to find where the minute fungi that thus appear exist during the growing season, M. Bontroux discovered that they were borne in great abundance in nectariferous flowers, where the ferment grows at the expense of the saccharose of the nectar. This, then, is where the fungus lives during the spring and summer previous to the maturation of the fruit. The transfer-



ence of the ferment from the flower to the fruit remained to be accounted for. Thinking it might be due to the agency of insects, M. Bontroux examined the bees which frequented flowers in the nectar of which he had found the ferment-plants, and found the same kinds upon them. M. Bontroux explains the life-history of these organisms as follows: The ferments developed in flowers and fruits during the summer are preserved during the cold season, partly, perhaps, in the remains of plants, partly in the ground, and partly in the winter habitations of insects. In the spring, the germs that remain alive are borne by insects to the nectariferous flowers, where they are developed; in summer they are cultivated from flower to flower, being sown from one to another by insects that visit them, and are carried to ripe fruits by the same agency.

It has been in dispute whether plants absorb noxious substances which may be present in the soil, or have a capacity to discriminate against them. Freytag concluded, from experiments he made, that they have no discriminating power, but are compelled to take up whatever may be in the soil in a suitable form for assimilation. Liebig has advanced the same doctrine, but it has been contradicted by the results of experiments made by other observers. Mr. Francis C. Phillips publishes, in the "Journal of the Franklin Institute," the results of experiments which he made on this subject with selected plants, at Alleghany Park. His conclusions are, that healthy plants, grown under favorable circumstances, may absorb through their roots small quantities of lead, zinc, copper, and arsenic; that lead and zinc may enter the tissues in this way without causing any disturbance in the growth, nutrition, and functions of the plant, and that the compounds of copper and arsenic exert a distinctly poisonous influence, tending, when present in large quantity, to check the formation of roots, and either killing the plant or so far reducing its vitality as to interfere with nutrition and growth. Freytag and others have supposed that the absorption of poisonous metals causes no disturbance until a certain degree of concentration is reached, when the plant rapidly withers and dies; while others suppose that the plants absorb no such substances. The theory of Freytag seems to have the weight of facts in its favor, and if it is possible that crops may become charged in this way with poisonous elements of the soil, it becomes a matter of the highest importance that, wherever there is danger of such impregnation, the most efficient means be employed for averting it, for soil once impregnated with copper, lead, and zinc, may year after year bear crops poisoned in the same manner.

Ad. Mayer has reinvestigated the question of the capacity of the leaves of plants to assimilate ammonia. He found it to exist in the higher plants, but that the legumes, which are believed to gather considerable quantities

of nitrogen from the air, have no peculiar power in this respect. He infers that the practical significance of the capacity is very small. Experiments by Hässelbarth and Wein indicate that while nitrates are readily assimilated by plants, ammonia is taken up with difficulty, if at all.

The most noticeable recent experiments on the sources of the ash ingredients of plants are those of Grandean on the functions of the so-called *matière noire* of fertile soils, or the black inorganic matter, insoluble in water or acids, but soluble in alkalies, which can be extracted from the soil by ammonia. Notwithstanding it has been made probable that the organic matter in the soil does not contribute directly, to any appreciable extent, to growth of the plant, those soils which are distinguished for their fertility in general contain much humus, and soils deficient in organic matter are usually improved by adding humus to them. Grandean believes that the organic matter contributes to this property by acting as a solvent by means of which the inorganic salts in the soil are embodied in a peculiar compound with it, and are thus taken up and supplied to the roots of the plant in an assimilable shape, and has published the results of a number of experiments made by him with the *matière noire* of the Russian "black earth" and with other soils, in support of his view. Professor H. P. Armsby suggests that the humus acts through its decomposition, by supplying carbonic acid as a solvent for the rock-dust with which it is intermixed. Hence, if by any means the organic matter in the soil be increased, especially if it be finely divided and uniformly distributed, we have a considerable increase in the carbonic acid of the soil, and an increase in the rapidity of the solvent action which converts rock-dust into available plant-food. Add to this the solvent action of the acids formed by the decay of the organic matter, and the effect on the porosity, temperature, permeability, etc., of the soil, each in its turn reacting on the rate of weathering as well as on the growth of the crop, and we can readily see why humus should have a high value in the soil. Moreover, the natural organic matter of the soil is a consequence as well as a cause of fertility. A large amount of humus in a soil implies an abundant previous growth of vegetation, and this in its turn implies a soil of at least moderate original fertility.

It is agreed that the greater part of the carbon in plants is derived from the carbonic acid of the air; but the question has been much discussed whether a part of it may not be derived directly from the carbon matters contained in fertile soils. A few experiments by Van Tieghem and Blociszewski in the growth of embryos deprived of their endosperm in artificially-supplied albumen apparently confirmed the view that it might. Other experiments by Stutzer, in which it appeared that no growth took place when carboxyls only were present,

but that alcohol groups were required, indicated that in all the cases of apparent direct conversion carbonic acid was first found and became actually free in the soil before assimilation took place. Experiments with chlorophyll-free plants gave similar results. Stutzer's conclusions were confirmed by Schmöger, who did not, however, regard them as decisive. Experiments with such organic matters as are found in the soil have in general given negative results. Experiments by Böhm and Moll seemed to show that plants were incapable of producing starch when supplied with carbon only through their roots. Leaves were separated from starch and arranged with the basal end in an atmosphere containing carbonic acid, and the other end in an atmosphere free from it; no formation of starch could be detected in the part of the leaf deprived of carbonic acid, although it took place vigorously in the other end. These experiments, as well as the very similar ones of Cailletet, while they do not conclusively show that plants may not assimilate carbon from organic compounds, do show that under ordinary circumstances and in ordinary soils the amount of carbon which plants obtain through their roots is, at least, too small to be of any practical significance.

**ANIMAL CHEMISTRY.**—Recent experiments by Messrs. Chittenden and Griswold on the diastatic action of saliva under various conditions have revealed the fact that human mixed saliva in the presence of an equal volume of artificial gastric juice containing .05 per cent of hydrochloric acid is capable of forming, from a given quantity of starch, a much larger amount of sugar than the same quantity of saliva alone can do under a like degree of dilution; this being the more remarkable, when it is remembered that the same percentage of acid by itself greatly retards the diastatic action. This somewhat curious fact has led Mr. R. H. Chittenden, with Mr. J. S. Ely, to study the individual influence of several bodies of physiological importance on salivary fermentation. They directed their attention particularly to the inquiry whether many of the digestive processes in the body may not be more dependent for their fullest action on the stimulating or other influence caused by the mere presence of many of the digestive products, than has generally been supposed. Several of the products of digestion, it is true, when present in the digestive mixture in excess, have been found to retard the digestive process; but there are no facts to warrant the belief that the products of one digestive process necessarily hinder the action of some other allied ferment; for it is ordinarily understood that any accumulation of the digestive products simply hinders the action of their own particular ferment by clogging the digestive fluid. The results of their experiments show that peptones, a product of gastric digestion, exercise a decided influence on salivary digestion, stimulating the ferment to increased action, particularly in the

presence of acid which by itself completely prevents the conversion of starch into sugar.

The *ptomaines*, alkaloids produced by the decomposition of animal bodies, appear to have been discovered simultaneously and independently by M. A. Gautier, of France, and Professor Selmi, of Bologna. M. Gautier detected them in the course of chemical researches; Professor Selmi, while examining the fluids of a corpse in aid of a legal investigation. In the latter case, Professor Selmi detected the presence of an alkaloid that could not be identified with any body whose reaction was known, and confirmed his discovery by repeated experiments. Afterward he found, in the scrapings of the skeletons of subjects that had been buried for six and eleven months, fixed and crystallizable alkaloids possessing special chemical and physiological properties. Some of them were extracted by ether, others by chloroform or amyl alcohol; but, unfortunately, they were all yielded in extremely minute quantities. It is established by these experiments that an organic poison may always be found in an exhumed body, even when the person has not been poisoned. All bodies exhumed a month or two after death, all viscera preserved in bottles with or without alcohol, yield, when treated by Stass's method for the extraction of alkaloids, a certain quantity of ptomaines poisonous to animals that are made to take them. Although the existence and poisonous nature of the ptomaines have been proved, little has been determined concerning their chemical nature. Selmi has not isolated a pure ptomaine, nor has he made a salt or an analysis of them; he has only given their reactions. They are bodies of energetic reducing powers. With sulphuric acid they produce a violet-red color, and give out an agreeable odor like that of the hawthorn when heated. In the present state of our knowledge, we are not authorized to affirm that these alkaloids have produced poisoning until we shall have been able to isolate them and characterize them individually by the distinctive chemical reactions that are peculiar to them. The presence in a toxicological analysis of bodies presenting the general characters of the cyanic alkalies, and capable, like them, of causing the death of animals to which they are given experimentally, can not furnish a presumption of poisoning.

**INDUSTRIAL CHEMISTRY.**—A new industry has recently been established in the Landes of France, in the extraction and applications of the oils of the pine. Two kinds of oils are extracted from this tree: heavy oils employed for painting and the preservation of woods, and lighter oils for the purposes of illumination. *Pinoleum*, or the heavy oil of the pine, is obtained by distilling resinous woods at a low temperature. It is composed of essence of turpentine (85 per cent), metanaphthaline, resin-oil, phenic acid, creosote (40 per cent), and coal-tar, benzole, retene, etc. (25 per cent). It is valuable for the injection of



woods, and might advantageously take the place of the metallic salts generally employed for that purpose. It is also capable of being very serviceable in painting. The lighter oil for illumination is extracted directly from the wood by submitting it to distillation in special apparatus, and treating the product with chemical purifying agents. The oil thus prepared is of a light yellowish color, and may be used immediately. Belonging to the category of essential oils and being isomeric with the essence of turpentine, this oil has the same composition ( $C_{20}H_{32}$ ), and is distilled at the same temperature,  $300^{\circ}$  to  $340^{\circ}$ , but has the great advantage over turpentine of not forming resin and of not containing pinic or sylvic acid. It is wholly inexplosible, and is therefore perfectly safe as a light; and its light is one third brighter than that of petroleum, since it contains 88 per cent of carbon to 82 per cent in petroleum.

Professor Baeyer has communicated a favorable account of the progress which is making in the manufacture of artificial indigo at Ludwigshafen, and of the application of the dye to cloth-printing. A cheap cinnamic acid to serve as the base for the preparation is made directly by fusing benzyl chloride with acetate of soda, the operation being carried on in large boilers fitted with mechanical stirrers. The cinnamic acid is then treated, by hundred-weights at a time, with nitric acid and the substances required in the successive processes leading to the formation of propiolic acid. The last substance is precipitated from the solution of the soda salt by means of an acid, and, after washing, is sent to market as a paste. Artificial indigo is not itself manufactured at the works, but the coloring-matter is deposited by the printer in the fiber of the cloth from propiolic acid, as is aniline black from aniline. For this purpose a mixture of propiolic acid and xanthate of soda, to which a proper amount of thickening has been added, is printed on the cloth. The color makes its appearance on exposure to the air. It is found to be fast, and exhibits the characteristic tints of indigo in both light and dark shades. The processes of preparation and conversion, though long, work so well that the whole can be carried out with perfect ease. The only serious imperfection in the series is the loss of 40 per cent of cinnamic acid in the form of para-nitro-cinnamic ether. Professor Roscoe suggests that the difficulty arising from this source may possibly receive a solution from the recent researches of Otto Fischer on the synthesis of the rosaniline dyes by means of para-nitro-benzaldehyde, a body obtained by the limited oxidation of para-nitro-cinnamic acid. At the time Professor Baeyer visited the manufactory, 200 kilogrammes of propiolic acid paste, containing 25 per cent of the dry acid, were produced every day, and sold at the price of ten shillings per kilogramme.

M. Pechiney, of the chemical works at Se-

lindres, France, has made important improvements in the manufacture of the chlorates, whereby the loss of from 15 to 25 per cent of the total incurred in the manufacture of chlorate of potash by the ordinary method is reduced to one of below 5 per cent. In the method of preparation heretofore pursued, of treating milk of lime with chlorine and adding potassium chloride to the resulting "crude chlorate liquor," a mixture of two parts of potassium chlorate and about seven parts of calcium chloride is formed, from which it has been impossible to extract more than from 75 to 85 per cent of the chlorate of potash in any satisfactory state of purity. In this process the calcium chloride is separated by evaporating to a suitable degree of density, crystallizing by cooling to between  $10^{\circ}$  and  $12^{\circ}$  C., adding to the mother-liquor water and lime, and heating to determine the formation of oxychloride of lime, till only three tenths of an equivalent are left. The solution obtained, after the calcium chloride is separated, can now be made, by adding potassium chloride as before, to yield 95 per cent of the chlorate of potash in clear crystals. The solution of calcium chlorate obtained as above, treated with sodium sulphate, is made to yield chlorate of soda, and this is used with most excellent effect as an oxidizing agent in the process of dyeing aniline-black with the salts of vanadium, for the removal of the surplus aniline and the fixing of the color. M. Pechiney has also introduced a process for recovering sulphur from soda waste by injecting air into the "yellow liquor" till the right point of oxidation has been reached, and decomposing with hydrochloric acid. A precipitation of lime takes place during the process, and this facilitates the operation by rendering a less quantity of the acid necessary.

ANTISEPTICS.—Professor Barff has introduced a new antiseptic compound which is adapted to preserve food in a fresh state for any length of time, and appears to be superior to any other application for the purpose. It is called boro-glyceride, and is obtained by heating together boric acid and glycerine in the proportion of 62 parts of the former substance to 92 of the latter, when it is produced as a hard, ice-like substance. For use it is mixed with about fifty times its own weight of water. A gallon of the mixture, which costs less than an English shilling, will preserve as much meat as can be surrounded by it in any containing vessel. It can be used by untrained persons, and the same liquid may be employed over and over again. The quality of the work of this preservative was proved before the Society of Arts by the exhibition of articles that had been kept in it for several months, and were still perfectly fresh and retained their distinct natural flavors. Its innocuousness is proved by the fact that milk treated with it was used at a college near London, containing three hundred persons, during all

the summer months of 1881, without any one suspecting the presence of anything unusual.

Remarkable antiseptic properties have been discovered in peroxide of hydrogen by MM. Paul Bert and P. Regnard. It immediately and definitely arrests all fermentation due to an organized ferment, and kills the ferment, so that the fermentation does not recommence, even after the removal of the hydrogen peroxide by one of the substances that destroy it most rapidly. It also arrests the putrefaction of all substances which do not decompose it. At the same time, it has no effect on diastase fermentations, and the gastric and pancreatic fluids continue to act in solutions containing it. MM. Bert and Regnard further announce, as results of their investigations, that dilute hydrogen peroxide is not destroyed by fats, starches, soluble ferments, egg-albumen, casein, the peptones, creatine, creatinine, or urea; it is rapidly destroyed by nitrogenous collagens, by musculin, fibrin of the blood, and various nitrogenous vegetable matters; and that this action is definitely arrested by a temperature above 70 C. (140° Fahr.). Putrefaction, however, leaves the peroxide entirely intact. Acting upon the suggestions of these investigations, MM. Péan and Baldy, of the Hospital St. Louis, have used the peroxide as an antiseptic in surgery, with very successful results. They find that, when containing from two to six times its volume of oxygen, it appears to be capable of advantageously replacing alcohol and carbolic acid. It can be employed externally, for the dressing of wounds and ulcerations of all natures, in injections and in vaporization, and internally. Satisfactory results have been obtained from its use in old wounds as well as fresh ones; and the general as well as local state appears to be favorably influenced by it. It has the advantage over carbolic water, of being free from all poisonous effects and unpleasant odor, while its application is entirely painless. Peroxide of hydrogen for surgical use must be entirely neutral. That obtained in commerce contains a considerable quantity of sulphuric acid, and is therefore not wholly safe.

Dr. R. Koch having remarked that the only substances worthy of the name of disinfectants are chlorine, bromine, iodine, mercuric chloride, and perhaps potassium permanganate, and having particularly disputed the antiseptic properties of zinc chloride, Fr. Boillat calls attention to the fact that for a substance to be an antiseptic it is not necessary for it actually to destroy the germs. In the antiseptic treatment of wounds it would be impossible to employ such violently acting substances as those mentioned by Koch. All that is necessary is the presence of substances capable in some way of restraining the development of the germs, and such substances may from that fact properly be called antiseptics. Many antiseptics have the power of coagulating proteids. Among these is zinc chloride, and Boillat found

by experiments that coagula prepared with that substance required from thirty-one to forty-five days for bacteria to appear in them, while in serum, gelatine, and phenol albuminates prepared at the same time, the bacteria appeared in one or two days. Applied to the surface of a wound, zinc chloride forms a superficial coating of the neutral zinc albuminate, which affords no means for the bacteria to develop, and protects the parts under it.

**PETROLEUM-TESTS.**—Engler and Haas have thoroughly tested the different forms of apparatus in use for the determination of the flashing-point of petroleum, and find that all those are worthless in which the determination is made indirectly by measuring the tension of its vapor; because the tension of the vapor of petroleum and its inflammability stand in no simple relations to each other. Those tests in which the petroleum is heated in an open vessel have also been found to give unreliable results. Among these is the Saybolt tester, used in the United States, which gives results that are too high. Many of those testers in which the oil is heated in closed vessels were found to be constructed on false principles. The following principles have been laid down as those which ought to be kept in mind in testing petroleum, or in judging of the efficiency of the testing apparatus: The quantity of petroleum used in each case must be the same, and for each separate test a fresh portion must be taken. The heating must be uniform and slow, and the heating period should extend over 10°; while those oils whose flashing-point is but little above the temperature of the air should be cooled about 10° before heating. The intensity of the ignition flame and its distance from the surface of the oil must be the same in all the tests. If the size of this flame be increased and its distance from the oil be diminished, the flashing-point will be lowered. The ignition flame must never be so near the oil as to cause local vaporization, and for this reason its time of action should be reduced to a minimum. In general, the conditions for the formation of combustible gases in the testing apparatus should resemble as nearly as possible those which occur in lamps or in petroleum-stoves. Victor Meyer's method, in which a closed cylinder, one fifth filled with oil, is heated in a water-bath to a desired temperature, and is then taken out and shaken violently and tested with a gas-jet, was found to possess the advantages claimed by its author, and to give a fairly accurate test. Abel's test, adopted by the English and German Governments, employs an air-bath inclosed by a water-bath, to insure a slow heating of the oil, and may be tried and read at any time by merely opening the lid of the vessel. Its values are, however, regarded as too low. Skalneit has suggested that the specific gravity, the boiling-point, and the index of refraction of petroleum, be used in judging of its quality; but Engler and Haas have arrived at the con-



clusion, after experiment, that neither of these properties can be used as an accurate gauge. The best results were obtained with instruments made by the authors themselves, and provided with arrangements for exploding the vapor by means of an electric spark. The instruments of both are complicated, and require considerable skill on the part of the operator. Haas's apparatus is a clever modification of Victor Meyer's. Mr. Peter T. Austen, who also has investigated in this line, remarks that Meyer's and Haas's methods are both dependent for reliable results upon the interval of time that is allowed between the shaking, and objects to the necessity of repeating the shaking from degree to degree as an unpleasant feature of them. Liebermann's apparatus is free from these objections. In it a current of air is forced through the heated petroleum, so that it is charged with petroleum-vapor, and is tested from time to time with a lighted match or small flame. The apparatus has the recommendation of simplicity of construction and manipulation, and gives concordant results. Mr. Austen has adopted a modification of Liebermann's apparatus and method, in which the supply of air from a source of compressed air is regulated and controlled by a pinchcock on India-rubber tubing, so that a foam of about a half a centimetre is maintained on the surface of the oil, and the test is made from degree to degree by applying a small blow-pipe flame or a match. It is noteworthy that a slow continuous current of air gives a considerably higher flashing-point. The rapid current is effective by bringing the vapor to the mouth of the tube, and diluting it sufficiently to form an explosive mixture. In all the apparatus suggested by Meyer's principle the determinations are largely independent of the size or shape of the oil-holder, the quantity of oil, the means of ignition, the distance of the spark or flame from the surface of the oil, and the rapidity of the heating; and in Mr. Austen's application the determination of the flashing-point becomes as easy and trustworthy an operation as that of determining the boiling-point, while the results have a significance wholly wanting to those obtained by the older methods.

**ISOLATION OF CÆSIUM.**—The isolation of cæsium, hitherto unachieved on account of the extreme affinity of the metal for oxygen, has been effected by Carl Setterberg, by the electrolysis of a fused mixture of cæsium and barium cyanides. Thus prepared, it is a metal very similar to the other alkali metals, silver-white, very soft and ductile, having a melting-point of  $26.5^{\circ}$  C. ( $82^{\circ}$  Fahr.), and a specific gravity of 1.88. On exposure to the air it ignites spontaneously, and if thrown upon water it burns like potassium, sodium, and rubidium. Setterberg has proved anew that in consequence of the affinity of the metal for oxygen and the volatility of its salts, the preparation of cæsium by igniting its carbonate along with carbon—according to the ordinary method for

obtaining rubidium and potassium—is quite impossible.

**CHILI (REPÚBLICA DE CHILE).** To the general statements of area, territorial divisions, population, etc., given in preceding volumes, it may here be added that the population\* on January 1, 1880, has been reported at 2,183,434.

The President of the Republic is Señor Don Domingo Santa-Maria, inaugurated September 18, 1881, for the usual term of five years.

The Cabinet was composed, April, 1882, of the following ministers: Interior, Señor Don J. M. Balmaceda; Foreign Affairs and Colonization, Señor Don L. Aduante; Finance, Señor Don P. L. Cuadra; Justice, Public Worship, and Public Instruction, Señor Don J. E. Vergara; and War and the Navy, Señor Don C. Castellón.

The regular army comprised, in 1881, 10 generals, 21 colonels, 77 lieutenant-colonels, 103 majors, 191 captains, and 513 lieutenants, together 915 officers; ten battalions (9,040 men) foot, three regiments (1,296 men) horse, and two regiments (2,100 men) artillery; total strength of army, 12,436. The National Guard counts 20,400 men enlisted.

The navy in the same year embraced two iron-clad frigates, one monitor, two corvettes, two gunboats, six steamers, one sailing-frigate, three pontoons, and a number of smaller steamers—the whole equipped by 1,200 sailors.

Navy officers: one vice-admiral, four counter-admirals, eleven captains of ships-of-the-line, ten captains of frigates, twenty-two captains of corvettes, forty-five lieutenants, and forty-two enrolled cadets.

**FINANCES.**—The latest report of the Minister of Finance submitted to Congress renders an account of the actual workings of the Treasury in 1881. According to this document, the revenue of the republic in that year aggregated \$36,434,721, toward which income the custom-house contributed \$22,425,045; internal revenue (stamps, etc.), \$6,114,138; revenue from monopolies, \$2,549,376; the post-office, \$309,288; railroads, \$4,418,980; and sundries, \$617,891. This shows that the Government collected, in 1881, \$10,492,721 more than the preceding year. This excess of revenue resulted from an increased income from duties, war contributions paid by the enemy, guano, and railroads. On the other hand, less revenue was derived in 1881 from the mint, nitrate, and monopolies. The actual expenditure, part of which went toward covering deficiencies in 1880, was \$36,604,562. Of this amount only \$16,000,000 were spent to meet the requirements of the ordinary budget, the balance being absorbed by the war, the working of nitrate-of-soda deposits, etc.

During the first quarter of 1882 the ordinary revenue yielded \$17,537,181, and the extraordinary revenue \$1,291,857; it was estimated by the minister that the former would prove

\* See "Annual Cyclopædia" for 1879.

to have yielded in 1882 \$34,352,000, and the latter \$1,452,100. If to this there is added a balance that accrued to the Treasury from 1881, the minister calculates that the aggregate revenue for 1882 will have reached \$41,222,570, against a budget of outlays voted by Congress of \$25,562,838. But to this latter amount there will still have to be added about \$12,000,000 war expenditure and \$6,174,700 to be used in February and March, 1883, toward canceling bonds under the 1876 and 1877 loans falling due. On the other hand, the minister expects to save in the way of expenses \$4,000,000, which would enable him to transfer to the credit of 1883 \$1,500,000. For the latter year he estimates an income of \$36,462,000, and outlays to the amount of \$34,770,000. The total amount of bonds due that were to be paid off early in 1883 was \$10,000,000.

The foreign national debt of Chili amounted, in accordance with this officer's report, to \$34,870,000 on June 30, 1882; the home debt to \$56,546,584. The former involved at the time an annual payment of interest of \$1,944,237, and the latter of \$1,837,630. Add to this \$2,010,089 going toward the sinking fund, and \$1,500,000 loss in exchange (premium on the gold to be remitted to Europe for coupons), and it will be seen that Chilian expenditure under this head amounted to \$6,891,956 in 1882.

The report of the Minister of the Interior dwells on the tranquillity prevailing throughout the republic on the occasion of the transfer of powers when the new President took charge of the affairs of the country in 1881, as well as when the congressional and local elections took place. He mentions that several reform bills are submitted to Congress bearing on elections in the departments, and the rights of and protection to citizens, etc. Furthermore, Congress is urged to elaborate a law reforming the management of Government railroads, the administration of the latter at present being split into two distinct departments, in lieu of which it is proposed to substitute a central one.

**RAILROADS.**—The total length of these Government lines is at present 947 kilometres (equal to 597 miles), built at an aggregate cost of \$40,000,000. The net earnings of the Valparaíso-Santiago line have been, in 1881, \$948,896, being \$83,206 less than in 1880, but the Government has availed itself of the line for transporting troops, ammunition, etc., to the amount of \$217,567, which have to be added to the above earnings. There were forwarded 847,415 passengers against 662,185 in 1880; goods, 445,566 tons, being 3,742 tons in excess of 1880. The Southern Railroad shows net earnings \$894,445 greater than in 1880.

Congress sanctioned in 1882 the ensuing lines, and ordered the necessary surveys in consequence: Serena-Rivadavia; Quilpé-Santiago; Pelequen to Peumo; Parral to Canquenes; Coihue-Mulchen, and Robleria-Fort Victoria.

The Government recommends the building

of three additional lines, viz.: a branch line on the Central Railroad from Mapocho to the Condes mines; from Palmilla to Matanzas, and from Concepcion to Coronel, and a new tramway at Santiago. A number of new iron bridges were ordered to be built over various rivers at a total expenditure of \$268,697.

Total length of lines of railroads in operation early in 1881, 1,689 kilometres, or 1,064 miles.

**STATISTICS.**—The Chilian mails forwarded in 1881, altogether: 8,872,234 letters, being 588 more than in 1880; 19,142 sample packages, and 11,640,060 newspapers, being 656,623 more than the previous year. The post-office netted, in 1881, \$208,039, being \$24,922 in excess of the year preceding. Postal orders paid \$899,866.

To the 5,534 miles of telegraph in operation in Chili in 1881, there were to be added without delay 2,910 miles. The duplex system prevails on these lines. There were sent, in 1881, 287,476 messages, for which the sum of \$84,671 was collected, being \$51,466 more than the previous year. The Government forwarded and received 159,999 messages besides, paying for the same \$159,999, being \$90,281 more than in 1880.

The latest census statistics, those of 1881, show the populations of the principal cities, with the municipal expenditure set against each item: Santiago, 208,708 souls, city dues paid, \$1,174,882; Valparaíso and the suburb Viña del Mar, 96,558, \$620,754; Talca, 91,645, \$106,210; Copiapó, 32,659, \$105,916; and Rancagua, 18,334, \$103,898.

**COMMERCE.**—Trade statistics for 1881 show a notable increase of importation into Chili, as compared with the previous year. Thus, there were imported \$39,564,814 worth of merchandise and specie in 1881 (of the latter only \$433,692), against \$29,716,004 (the latter amount including \$29,427 specie) in 1880.

Chilian exports reached in 1880 only \$51,648,000; in 1881 they amounted, inclusive of specie and goods re-exported, to no less than \$60,525,859.

The increase of imports was: from England, 31 per cent; Germany, 54 per cent; France, 27 per cent; Peru, 121 per cent; the Argentine Republic, 39 per cent; and the United States, 5 per cent; the decrease from Spain was 55 per cent; Belgium, 37 per cent; and Paraguay, 89 per cent.

CHIEF IMPORTS.	1880.	1881.
From England .....	\$18,398,324	\$17,589,267
" Germany .....	4,785,642	7,885,870
" France .....	4,399,085	5,588,916
" Peru .....	1,113,726	2,905,049
" Argentine Republic .....	1,465,063	2,032,517
" United States .....	1,667,078	1,748,184

The principal articles of import from Chili into the United States are nitrate and wool. Of the former, there were received, in the fiscal year 1881, 28,941 tons; of wool, 1,852,721 pounds.



The leading European nations, on the other hand, take nearly all the copper, the bulk of the nitrate and wool, and all the wheat and barley shipped abroad by Chili, leading to an extensive trade by both direct steamship lines with some of those nations, and by sailing-vessels, thus reducing the freight rates, and rendering American competition extremely difficult in anything but specialties produced better and cheaper in the United States than elsewhere. Our heaviest export to Chili is made up of plain cotton fabrics.

The re-establishment of peace is not likely to produce much of change in this respect, but it will by degrees restore to us a valuable Peruvian trade.

The Chilean export movement in 1881 embraced the ensuing items:

Products of the mines.....	\$47,145,757
Agricultural products.....	9,967,780
Manufactures.....	107,593
Sundry other articles.....	262,801
Merchandise.....	\$57,483,931
Specie.....	1,582,277
Total.....	\$59,066,208
Re-exported merchandise.....	\$1,327,041
Specie.....	182,610
	1,459,651
Total.....	\$60,525,859

There has been a falling off, as compared with 1880, of \$1,000,000 in copper exportation, and \$2,000,000 in that of silver; but nitrate of soda has been rapidly on the increase since Chili occupied Tarapacá, and its export amounted, in 1881, to \$22,891,000.

EXPORT OF ALL KINDS OF COPPER FROM CHILI, DURING TWENTY YEARS, IN FINE COPPER, IN TONS OF 2,240 POUNDS.

YEAR.	YEAR.	YEAR.
1862..... 43,109	1869..... 54,867	1876..... 50,740
1863..... 32,540	1870..... 49,139	1877..... 45,490
1864..... 47,500	1871..... 41,200	1878..... 45,770
1865..... 45,927	1872..... 46,837	1879..... 49,890
1866..... 44,820	1873..... 42,165	1880..... 42,990
1867..... 44,654	1874..... 45,240	1881..... 37,500
1868..... 43,669	1875..... 45,430	

The decrease in the production of copper is due to the drafting of miners into the army. As soon as a treaty of peace between the belligerents shall have been signed, it is expected that Chili will be able to withdraw from Peru and Bolivia 20,000 of the 32,000 soldiers forming the present army of occupation, and that the output of the Chilean copper and silver mines will gradually recover from its recent comparative decline.

CHILIAN WHEAT EXPORTATION.

YEAR.	Tons.	YEAR.	Tons.
1872.....	373,400	1877.....	299,600
1873.....	459,900	1878.....	273,300
1874.....	356,800	1879.....	375,000
1875.....	839,100	1880.....	411,400
1876.....	845,000	1881.....	359,000
Total.....	1,929,200	Total.....	1,713,300

Scarcity of hands, through drafting into the army, and less abundant crops, have caused the falling off noticeable above.

As for the vicissitudes of the war in 1882,

we refer to the details given in this volume under "PERU." Negotiations for the re-establishment of peace, with and without mediation, both American and European, have followed each other in rapid succession without leading to any practical result. The retention of Tarapacá by Chili, the latter makes a condition *sine qua non*, the latest proposition in addition thereto on her part being that Tacna and Arica be given to Bolivia, so that the latter may form a barrier between the Chilean acquisition of Tarapacá, and Peru, and at the same time restore to Bolivia an outlet to the Pacific, which she possessed before the war, though of less magnitude and value than the one now proposed by Chili.

THE COUNTRY.—Count Eugene de Robiano, who traveled throughout the republic in 1882, has just published a book on Chili, entitled "Le Chili, l'Araucanie et le détroit de Magellan" (the house of Plon, Paris, publishers), in which we find the ensuing introductory passage: "Chili, together with Brazil, is of all South American countries the one whose progress has been most astonishing the last twenty years, and the state of civilization there reached places Chili in the first rank among those nations living at a great distance from us whose future seems safest."

The fertile plateau stretching through a great portion of Chili parallel with the coast, between the Cordilleras of the Andes and the coast-range of mountains, Count Robiano describes in about the following words: "This central valley, as may be supposed, varies a good deal in breadth, and does so to an equal extent as regards its products, which embrace mineral ores, cattle, vines, and cereals. Irrigation is, however, necessary, there being hardly any rain, but plenty of streams from the Cordilleras. Chili produces not only the cereals, etc., of Europe, but also tropical fruits. The climate is probably the most healthy on earth, while in point of minerals its deposits are almost inexhaustible."

The vigor and enterprise with which Chili pushes into the country of the semi-barbarous Araucanian Indians, one of its possessions, Count Robiano dwells on at great length, and so does a correspondence from Chili we find in the "Norddeutsche Allgemeine Zeitung." A passage from the latter reads about as follows: "Our readers are probably aware that of the eighteen provinces into which Chili is divided, the two southernmost—Valdivia and Llanquihue—have, since 1848, become prosperous German settlements. These two provinces are separated from the north of Chili by Araucania, a strip of land where hitherto the Pehuenches, a tribe of wild Indians, held exclusive sway. While Spain has, during three centuries, been unable to subdue these barbarians, Chili has not been more successful than the mother-country in this respect till within the past few years, for the Araucanians restricted their defense to a guer-

rilla warfare. For some years past the Araucanians have gradually been shut in by a circle of forts, which circle has gone on narrowing, and a railway has been pushed all the way to Angol, into the very heart of Araucania, a city founded only fifteen years since. Now the territory makes good agricultural headway, so that wheat and wine are for some years past exported from there on an extended scale. Two passes, or 'boquetes,' across the Andes, however, remain open, and thence the Araucanian and Argentine Pampa Indians occasionally make raids into that portion of Chili. An expedition has been set on foot from Angol for the purpose of building forts at the entrance of the 'boquetes' named, and the Government has proposed to Congress the construction of a railroad from Angol to Valdivia. This matter is to be pushed through without delay. The railroad will run all the way through the center of the valley situate between the Cordilleras and the coast-range from Valparaiso in a southerly direction, with three intersecting lines at suitable distances to connect the Cordilleras with the seaports that may be selected. This entire railway is to be built out of a \$6,000,000 surplus which the republic will have at its disposal early this year after paying off \$10,000,000 of the public debt. As soon as 20,000 men of the army of occupation return, after peace shall have been concluded, prosperity in Chili will make still more extraordinary strides."

CHINA, an autocratic empire in Asia, embracing the eighteen provinces of China proper, the province of Liantung outside the wall, the dependencies of Mantchooria, Mongolia, and Thibet, and the vassal kingdom of Corea, and possessing undefined suzerain powers over the kingdoms of the Malay Peninsula. Tsait'ien, the present Emperor, is a child, born in 1871, who succeeded to the throne by proclamation on the demise of T'oung-che in 1875, who died in his eighteenth year without appointing his successor. The proclamation was the result of an intrigue of the Empress Regent, widow of the Emperor Hienfung, and Prince Ch'un, his brother and Tsait'ien's father. Tsait'ien is the ninth Emperor in the Tartar line of Tsing, which succeeded the native dynasty of Ming in 1644. The government is regulated by the principles laid down in the book of Ta-tsing-hwei-tien and the writings of Confucius. The administration is directed by the Interior Council Chamber, consisting of four members, two of Tartar and two of Chinese origin, with two religious and legal advisers who see that their acts conform to the fundamental laws. There are under them six boards, each presided over by a Tartar and a Chinese: the board of civil appointments; of revenues, or finances; of rites and ceremonies; of the army; of public works; of criminal jurisdiction.

AREA AND POPULATION.—The area and population of the eighteen provinces are officially returned as follow:

PROVINCES.	Area : English square miles.	Population.	Population per square mile.
Chihli.....	53,949	27,990,871	475
Shantung.....	65,104	28,958,764	444
Shansi.....	55,268	14,004,210	253
Honan.....	65,104	28,037,171	354
Kiangsu.....	44,500	37,548,501	850
Anhui.....	48,461	34,168,059	705
Kiangsi.....	72,176	23,046,999	320
Chékiang.....	39,150	26,256,784	671
Fukien.....	53,480	14,777,410	276
Hupéi.....	70,450	27,870,098	389
Hunan.....	84,000	18,652,507	223
Shensi.....	67,400	10,807,256	162
Kansuh.....	86,608	15,198,125	175
Szechuen.....	166,800	21,435,673	128
Kwangtung.....	79,456	19,174,080	241
Kwangsi.....	73,250	7,813,895	98
Kweichow.....	64,554	5,288,219	82
Yunnan.....	107,969	5,561,320	51
Shéngking.....	227,274	2,167,286	10
Total.....	1,534,953	362,447,183	286

These returns are probably excessive. The population was formerly greater, being returned in 1840 as 414,686,994, or 320 to the square mile, and in 1852 as high as 450,000,000, or 347 to the square mile. Intestine wars and famines have since reduced the population to probably not more than 300,000,000. The extent of the outlying provinces and dependencies can be only vaguely determined, as their population and area are a matter of estimate, and the limits of the actual rule of the Chinese Government are shifting and uncertain. According to estimates of the missionaries the total area and population of the Chinese Empire are as follow:

DIVISIONS.	Area.	Population.
	Eng. sq. miles.	
China proper.....	1,534,953	362,447,183
Dependencies :		
Mantchooria.....	862,313	8,000,000
Mongolia.....	1,288,085	2,000,000
Thibet.....	643,734	6,000,000
Corea.....	90,800	8,000,000
Liantung.....	2,982	1,000,000
Total.....	3,922,817	382,447,183

The foreign population was returned in 1879 as 3,995, the majority residing at Shanghai. The number of British was 2,070; of Americans, 469; of Germans, 364; of French, 225.

MILITARY.—There are two distinct bodies of soldiery—1. The Mantchoo, Mongol, and Chinese Bannermen, distributed in permanent garrisons in the great cities, and representing the army with which the Mantchoo Tartars conquered and occupied China in 1644; and, 2. The native Chinese army, stationed in a great number of commands, each capable of mustering from 20,000 to 100,000 men in time of war, and performing police duties in time of peace. The foundation of a modern navy was first laid by the purchase of some ironclad gunboats in 1877. An ironclad man-of-war was completed in Germany in 1881.

FINANCES.—The public revenues, derived from land, grain, and license taxes, and from import and export duties, are estimated to be



about \$125,000,000 a year. The customs receipts only are published. These increased from 7,872,257 Haikwan taels (the Haikwan tael = \$1.50) in 1864 to 12,483,988 in 1878. The largest receipts are from export customs. The army consumes about \$75,000,000 of the revenues. There is a small public debt paying eight per cent interest, contracted abroad in two loans, one of \$3,138,375 in 1874, the other of \$8,021,380 in 1878.

COMMERCE.—The total imports in 1880 amounted to \$118,940,000, and the exports to \$116,825,000. In ten years the imports had increased 19 and the exports 27 per cent. There are twenty-two ports opened to foreign commerce since 1854 by treaty, although one of them, Nanking, has not been thrown open. The largest share of the foreign trade is with Great Britain, which received from China in 1880 146,081,679 pounds of tea, valued at £7,701,804, and £2,650,085 worth of raw silk, and imported into China £3,498,684 worth of cotton manufactures, £867,420 of woollens, and £698,201 of other goods, besides £3,778,201 of imports, mostly cotton manufactures, imported through Hong-Kong. The progress of China in adopting Western arts and commercial methods is retarded by the abuses of the system of Chinese officialism, as well as by the conservative prejudices of the people. The patronage of powerful mandarins is required to protect every novel enterprise of importance, and this is only to be obtained by sharing the profits with the patrons. The oldest undertaking of the kind, the China Merchants' Steam Navigation Company, has prospered in the end through the interest and support of Li Hung Chang. The company started in 1872 with two small steamers purchased at exorbitant prices from an English corporation. A subsidy in the form of liberal freights on the rice sent to the Mantchoo garrisons in Peking enabled them to compete successfully with the foreign vessels for the coasting-trade. They purchased other vessels, and in 1877 bought out the Shanghai steamship line with borrowed money, part of it advanced by the Government. The company was enabled to pay interest by the subsidies, but could not have long continued in existence, as the debts far exceeded the value of the vessels. The share capital stood at 751,000 taels and the borrowed capital at 3,800,000 taels in 1878. A reform in the management was instituted. The officials and their friends who had obtained places in return for the Government loans were dismissed, and their peculations stopped. This with the revival in trade has enabled the directors in three years to reduce the debt, lower the capitalization to something like the value of the fleet, and report a net profit of 21 instead of 7 or 8 per cent on the capital employed. The share capital was given in 1881 as 1,000,000, and the borrowed capital as 2,600,000 taels, 1,500,000 of which were Government loan. In addition to their coast-

ing business, the company has attempted to run packets to San Francisco and tea-ships to London. A Russian and Danish company completed a telegraph line from Shanghai to Tientsin at the end of 1881. The enormous coal deposits which are scattered all over the eighteen provinces have only been begun to be worked. In Formosa the Government started mines in 1876, employing an English engineer. The works were not commercially successful at first; yet the output increased from 14,000 tons in 1878 to 30,000 tons in the first six months of 1881. The coal sells at \$2.50 a ton, the cost of mining being only \$1.34; but embarkation is difficult. At Kaiping, near Tientsin in North China, a private company, encouraged by Li-Hung-Chang, is working rich beds, four to six feet thick. A woolen factory established in Lan Chowfoo, in the remote province of Kansuh, with public means by Tso-Tsung-t'ang, produces cloth very cheaply, though the quality of the wool thus far received is inferior.

AGRICULTURE.—In the vast territory of the Celestial Empire some district is stricken with famine nearly every year by drought, floods, or locusts, if not in consequence of an insurrection. In 1882 a rise of the Yangtse and its tributaries, caused by a heavy rain-fall coming at the time of the melting of the snows in Central Asia, overflowed large tracts of rice-land. The cultivators of China are extremely poor, never accumulating capital. This may be owing to the land laws, although they correspond to some of the advanced ideas of modern agrarian theorists. All waste lands belong to the crown, but whoever brings them under tillage acquires a clear title, and can freely sell the property. The property of a decedent passes to his male children in equal shares, and can not be bequeathed away from them. The greater part of the soil is owned in small parcels, or from five acres down to a sixth of an acre. The possessor of ten acres is considered well-to-do, and the owner of an estate of a thousand acres is accounted a millionaire. Over two thirds of the land is cultivated by tenants on the *métayer*, or half-profit system; the landlord providing the houses and paying the tax, which amounts to 10 per cent of the net returns, and the cultivator the simple implements besides his labor. One bad season reduces these tenants to beggary.

EVENTS OF THE YEAR.—The most important events to chronicle are the removal of the prejudices and the obstacles connected with the official system to the introduction of the material improvements of European civilization. The Kaiping coal-mining operations were nearly stopped in compliance with a memorial of one of the censors representing that they offended the protecting dragon of the district, and disturbed the *manes* of the lately deceased Empress, who is buried some sixty miles distant. It was only by bribery that these superstitious objections were overcome.

The enlightened Prime Minister, Li-Hung-Chang, upon the death of his mother, petitioned, in obedience to custom, to be relieved of his offices during the long period of mourning prescribed, taking the precaution to secure as his deputy a man in sympathy with his projects, Chang-Shu-Sheng, Governor-General of Canton. His request was at first refused, but he was finally relieved of his duties as Secretary of State and Governor of the Metropolitan Province, but retained as Imperial Commissioner of Commerce, and commander of the forces at Tientsin. Three daily newspapers are printed at Shanghai; the oldest, the "Shên-Pao," has a circulation of 10,000. The Rev. Mr. Allen, an American missionary, has founded a university at Shanghai. The cause of progress receives its chief support from Chinese merchants who have acquired wealth in foreign trade, already a numerous and powerful class. A new decorative order has been created for bestowal on foreigners of distinction who have rendered services to China; it is called the Order of the Double Dragon. (For legislation prohibiting Chinese immigration into the United States, see CONGRESS, UNITED STATES, and IMMIGRATION, CHINESE.)

**CHRISTIAN CONNECTION.** The statistics of the Christian Connection are very imperfectly reported, and no attempt has been made to compile them in tabular form for several years. The Connection has sixty annual or local conferences, ten of which are in New England and Canada, ten in the Middle States, and forty in the Southwestern and Western States, and includes, according to the most recent estimates, about one hundred and fifty thousand members. A kindred organization in the Southern States, called the Christian Church, originated in a separation from this body in 1854, which was provoked by the action of the General Convention on the question of slavery. The Rev. J. W. Wellons, a fraternal delegate from this body to the recent Quadrennial Convention, stated there that it numbered about twenty thousand white and five thousand colored members.

The Christian Connection does not assume any denominational name, but adopts the term Christian in a general sense simply to indicate that it makes a Christian profession. It accepts the Bible as its only rule of faith and practice, granting to every man the right of individual judgment, and professes fellowship with, and admits to its communion, all Christians, without regard to their theological opinions or their views or practices in ordinances. It has always encouraged preaching by women, and welcomes them to all the privileges of the church. Its government is stated by the editor of its official newspaper organ to be "neither Congregational, Presbyterian, nor Episcopalian. It is neither a democracy, an aristocracy, nor an autocracy, but a brotherhood with one only Master, even Christ, to whom each individual shall answer for himself."

**MEETING OF THE QUADRENNIAL CONVENTION.**—The Ninth Quadrennial Session of the Christian Convention of the United States and Canada was held in Albany, N. Y., beginning October 4th. The Rev. Asa W. Coan presided. The Sunday-school secretary reported concerning 875 Sunday-schools, with 52,000 members. The financial secretary reported that \$25,000 a year were needed for the several branches of denominational work. The publishing agent reported a net gain by the Publishing House at Dayton, Ohio, during four years, besides paying interest on its debts, of \$2,286. A weekly general religious newspaper and three Sunday-school papers were published at the establishment. The general weekly paper, the "Herald of Gospel Liberty," was originally started in Portsmouth, N. H., in September, 1808, and was the first religious periodical in newspaper form ever published. Outside of the Publishing House were published the "Christian Gem," at Suffolk, Va., as the organ of the Christian Church of the South, and the "Christian Indicator," at Kokomo, Ind. Reports were made of the condition of the educational institutions of the Connection, including Starkey Seminary, Eddytown, N. Y.; Antioch College, Yellow Springs, Ohio; the Christian Biblical Institute, Stanfordville, N. Y.; the Franklinton School, Franklinton, N. C.; Le Grand Institute, Iowa; and Union Christian College, Merom, Ind. Resolutions were adopted in favor of total abstinence from the use of intoxicating drinks, and prohibition of the traffic in them. Secretaries were elected for missions and church extension. Fraternal delegates were present from the Christian Church of the South; and six fraternal delegates were appointed to represent the Convention at the next meeting of the Southern Convention.

**CIVIL RIGHTS CASES.** (See LAW, CONSTITUTIONAL.)

**CLAY, CLEMENT CLAIRBORNE**, born in Madison County, Alabama, 1819; died near Huntsville, Ala., January 3, 1882. Mr. Clay graduated at the University of Alabama with honor at the age of sixteen. He was endowed by nature with more than ordinary intellectual abilities, and even when he was quite young was not unmindful of the obligations they imposed. When his father was elected Governor of Alabama, he appointed his son private secretary. He did not, however, forsake his books, but continued adding to the stores of a retentive memory, at the same time contributing editorials to the leading journals of Alabama. After his father was elected to the Senate of the United States, Mr. Clay went to the University of Virginia, and completed his legal studies. Returning to Huntsville, Ala., he commenced a successful practice of law. Soon his fellow-citizens insisted upon electing him as their Representative to the State Legislature, in which he served in 1842, '44, and '45. In 1846 the Legislature elected him Judge of the Madison County Court, where he presided un-



til 1848, when he resigned, to resume his practice. In 1853 he was elected to the United States Senate from Alabama. As a Senator he regarded himself as the envoy of a sovereign State to the council of the nation, and lost no opportunity of asserting the rights of that State as defined by Mr. Calhoun and other Southern statesmen. His course in the Senate was fully approved by his constituents, and in 1857 he was re-elected for a second term of six years by a unanimous vote of the Legislature. Returning with this unqualified indorsement, he renewed his efforts in behalf of his State, and was among the boldest champions of State rights.

When the invasion of these rights was commenced with military force, as viewed by the Southern States, and the Confederate States Government was sorely pressed by its assailants, Mr. Clay, who had been a member of the Confederate Congress, was selected by President Davis as an agent for the purpose of performing some important secret service, in connection with Jacob Thompson, on the Northern frontier of the United States. In May, 1865, at the close of the war, a reward was offered by President Johnson for the arrest of Mr. Clay, hearing of which he came forward and surrendered to the United States officer commanding at Macon, Georgia. He was shortly afterward taken as a prisoner to Fortress Monroe, and assigned a casement on the same floor with the late President Davis. Mr. Clay was detained at Fortress Monroe until April, 1866, when he was released on his parole, by the conditions of which he was allowed to go anywhere in the United States on private business, but was to make the State of Alabama his residence, and hold himself in readiness to obey at any time any summons made upon him by the Government of the United States.

COAL, BITUMINOUS, PRODUCTION OF, IN THE UNITED STATES, DURING THE YEAR ENDING JUNE 1, 1880.

I. The census returns give statistics drawn from eighteen States east of the one hundredth meridian, viz., Alabama, Arkansas, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Missouri, Nebraska, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia. Three hundred and fourteen counties are specified, of which forty-nine are in Kentucky, forty-six in Illinois, thirty-five in Missouri, thirty in Ohio, twenty-nine in Pennsylvania, and twenty-eight in West Virginia.

1. Number of establishments, 2,943, of which Pennsylvania, Ohio, and Illinois furnish the largest number (Pennsylvania, 666; Ohio, 618; Illinois, 590=1,874).

2. Capital employed and invested in establishments, \$90,000,000, of which Pennsylvania furnishes nearly \$40,000,000. Irregular workings are rated at about \$3,500,000.

3. Total product, 40,940,028 tons, of which Pennsylvania yields 18,425,163 tons, Illinois and Ohio over 6,000,000 tons each.

4. Value of total product at mines, \$49,733,603, of which Pennsylvania obtains \$18,567,129, Illinois nearly \$9,000,000, and Ohio nearly \$8,000,000.

5. Total number of men and boys employed, 96,475: of these Pennsylvania employs 33,248; Ohio, 16,331; and Illinois, 17,307. The working-time is here taken to consist of twelve months, of twenty-five working days each.

6. Wages paid to all classes of labor, \$30,707,059, of which Pennsylvania pays nearly \$11,000,000; and Ohio and Illinois \$5,000,000 and \$6,000,000 each.

7. Steam-engines used, 812. Value of these and other machinery, \$2,403,211.

8. Value of real estate, \$90,000,000: in Pennsylvania, \$27,152,403; Maryland, \$11,387,000; Ohio, \$8,529,931; Illinois, \$6,100,460; and West Virginia, \$3,597,259.

9. Acres of available coal-lands attached to working establishments, 410,642: being, in Pennsylvania, 118,311; in Ohio, 58,639; in Illinois, 55,061; in West Virginia, 46,659; in Kentucky, 34,635; in Tennessee, 23,743.

10. Tons raised yearly per man, on average, 431.53. Maryland gives the largest, 651.23; Pennsylvania next, 560.14; Tennessee, 487.90; West Virginia, 407.82; Illinois, 385.64; Ohio, 373.03.

As between the bituminous coal industry and the iron-ore mining industry, the former takes from the earth a product worth 140 per cent more, employs 205 per cent more hands and 46 per cent more capital, uses 161 per cent more materials, and pays 222 per cent more wages. The increase in the tonnage of the iron-ore mined during the census year is 136 per cent, and in that of bituminous coal 135 per cent, as compared with the census year of 1870; showing that these two great divisions of mineral production keep pace with each other, and are advancing nearly twice as fast as the production of anthracite. The reason of this is the obvious one that in the former cases new fields are laid under contribution, from time to time, as railroads are extended, whereas anthracite is restricted to its original area. Iron is mined in 135 counties, and bituminous coal in 314 counties, east of the one hundredth meridian.

II. Production of bituminous coal and lignite west of the one hundredth meridian. Twenty counties are specified in the States of California, Colorado, and Oregon, and in the Territories of Montana, Washington, and Wyoming.

1. Number of establishments, 46; of these, 25 are in Colorado.

2. Capital employed and invested, \$8,479,573; nearly \$6,000,000 is in Colorado, and \$1,240,000 in California.

3. Total product, 1,477,736 tons, of which Wyoming Territory (four counties, six establishments) yields nearly 590,000 tons, and Colorado, 463,000 tons.

4. Value of total product, \$3,272,470; of

which Wyoming Territory obtains \$1,080,451, and Colorado \$1,041,250.

5. Total number of men and boys employed, 3,441; of these, 1,434 are in Colorado, and 1,000 in Wyoming Territory.

6. Wages paid to all classes, \$1,828,401.

7. Steam-engines used, 42; of these, 20 are in Colorado.

8. Value of real estate, \$6,858,300; of this, \$5,448,100 are credited to Colorado.

9. Acres of coal-land, 33,000; 23,592 being in Colorado.

III. Production of coal in the United States for the year ending June 1, 1880, by coal-fields (tons of 2,000 pounds):

1. BITUMINOUS:	
Appalachian field .....	29,842,240
Western field (Illinois, Indiana, etc.) .....	8,721,101
Michigan field .....	100,800
Triassic field (Virginia and North Carolina) .....	46,246
Iowa and Kansas field .....	2,282,458
All fields west of the one hundredth meridian .....	1,477,786
Total bituminous .....	42,420,581
2. ANTHRACITE:	
Pennsylvania .....	23,640,519
Rhode Island .....	6,176
Total anthracite .....	23,646,695
Grand total coal production .....	71,067,576
Grand total of hands employed .....	170,585

In this connection it may be noted that the production of coal in England was, in 1855, 64,661,401 tons, in 1877 it was 136,179,968 tons, and in 1880 it was 146,818,122 tons. The number of collieries in 1880 was, in England, 3,880, and in the United States 3,264.

#### COAL-MINING WITH CAUSTIC LIME.

A new method of bringing down coal, in which quicklime takes the place of explosives, has proved a success in English coal-mines. The lime is obtained in a strongly caustic state from mountain limestone. It is first ground to the finest powder, and then pressed into compact cakes by a pressure of forty tons. The cakes are of the form of cartridges, two and a half inches in diameter, with a groove along the side. The hydraulic press, specially designed for compressing the cartridges, can be erected at a moderate cost in any colliery. The cartridges are ready for use after coming out of the press, but until they are needed they must be kept in air-tight boxes, to preserve them from damp. The drill-holes are made with a light boring-machine, and an iron tube, about half an inch in diameter, is inserted in the hole along its whole length. The tube is provided with a groove along the outside with perforations. A bag of calico covers the perforations and one end of the tube, and has a tap fitted on at the other end. The cartridges are lightly rammed, so as to insure their filling the bore-hole. They are inclosed with tamping in the same manner as a gunpowder-charge. The charge is then ready for blasting. This is accomplished by connecting the tap at the end of the iron pipe with a small force-pump by means of a flexible tube, and forcing in a quantity of water equal in bulk to the quantity of

lime in the tube. The water is driven to the lower end of the shot-hole through the tube, and escapes along the groove through the perforations and the calico, saturating the lime and driving out the air. The tap is closed, to prevent the escape of the steam generated by the action of the water on the lime. There is an interval after the introduction of the water before the steam attains a high pressure, so that all danger can be avoided. The action of the steam cracks the coal away from the roof. The sprags are left in under the coal, so as to allow the fissures to extend as far as possible. In many cases the coal is broken away for a distance of several inches beyond the end of the drilled holes. The expansive force of the steam generated by the usual charge of seven cartridges is about 2,850 pounds. The expansion of the lime takes place subsequently. Its effect may be measured by comparing the bulk of a quantity of lime equal to that used in the cartridges before and after slaking. The action is over in from ten to fifteen minutes. When the sprags, or props, are then removed, the coal falls from the roof in large masses, leaving a clean surface. The waste in dust and small coal is much less than when powder is used for blasting, being only about six per cent. For economy, thoroughness, avoidance of smoke, etc., the new process offers many advantages over gunpowder-blasting; but its greatest merit consists in averting the danger of explosions from the ignition of gas by the blast.

COLOMBIA (ESTADOS UNIDOS DE COLOMBIA). For statistics relating to area, territorial division, population, etc., see "Annual Cyclopædia" for 1877. The Executive of the confederacy, President F. Zaldua, inaugurated April 1, 1882, died later in the year, and the Federal Congress at Bogotá appointed Messrs. Otalora, Aldana, and Hurtado to exercise jointly the Federal executive power as "Designados" to the end of the presidential term. The Cabinet was composed of the following Ministers: Secretary of State and head of the War Department, Señor B. Noguera; Public Instruction, Señor J. M. Campas; Interior, Señor J. de J. Alirar; Finance, Señor M. Samper; Treasury, Señor N. Borrero; Foreign Affairs, Señor J. M. Suijano Wallis; and Public Works and Post-Offices, Señor F. F. Paul.

The chief magistrates of the nine States were as follow:

Antioquia, Señor Lucien Restrepo; Bolívar, Señor Benjamin Noguera; Boyacá, Señor Aristides Calderon; Cauca, Señor Ezequiel Hurtado; Cundinamarca, Señor Daniel Aldana; Magdalena, Señor José María Campo Serrano; Panamá, Señor Rafael Nuñez; Santander, Señor Solon Wilches; Tolima, Señor Marcelo Barrios. Each of the foregoing functionaries has the title of president, except those of Cundinamarca and Tolima, who are styled governors.

The United States Minister Plenipotentiary to Colombia is General Manney (accredited September 21, 1881), and the United States



Consuls at Bogotá and the chief Colombian seaports respectively are: Barranquilla, W. W. Randall; Bogotá, B. Koppel; Carthagena, E. W. P. Smith; Colon, J. Thorington; Panamá, J. M. Wilson; and Riohacha, N. Daniels.

The regulation strength of the army in time of peace is 2,000, and in time of war each of the nine States is required to furnish a contingent of one per cent of its population.

The revenue and expenditure of the republic for the fiscal year, 1882-'83, were officially reported at \$6,327,540 and \$9,097,549, thus showing a deficit of \$2,770,009. The previous budget had been: 1881-'82—income, \$5,917,000; outlays, \$9,529,547; showing a deficiency of \$3,612,547.

The national debt was reported as follows, on August 31, 1881:

Foreign debt.....	\$9,570,500
Home debt.....	10,886,278
Total.....	\$19,956,778

The foreign trade of the republic by land and sea was as follows:

	Imports.	Exports.
1880-'81.....	\$12,071,480	\$15,536,900
1879-'80.....	10,387,008	13,804,981
1878-'79.....	10,787,654	13,711,511
1877-'78.....	8,798,797	11,111,197

In 1879-'80 the exports were distributed as follows: To the United States, \$4,565,200; to England, \$4,326,200; to France, \$1,971,000; to Germany, \$1,648,000; and to other countries, \$1,294,581; together, \$13,804,981.

The following articles constituted this export movement: Quinine-bark, \$3,229,000; coffee, \$3,051,000; leaf-tobacco, \$1,284,000; hides, \$1,009,000; cattle, \$528,000; India-rubber, \$355,000; vegetable ivory (*táqua*), \$285,000; cabinet and dye woods, \$133,000; gold and silver bullion, \$2,765,000; gold and silver ores, \$515,000.

One of the most valuable products of Colombia, quinine-bark, or cinchona, is being rapidly exhausted there as well as in Peru, and its culture has therefore been successfully introduced into Ceylon and Java. We may be permitted to add, with reference to this important drug, a passage we take from Cassell's "New Popular Educator": The discovery of the medical properties of cinchona-bark is enveloped in great obscurity. All that we know about it for certain is this: Before the year 1638—that is to say, one hundred and fifty years subsequent to the discovery of America—not even the Spaniards were acquainted with the febrifuge qualities of cinchona-bark; but in this year, or thereabout, the Countess de Chinchon, the wife of the Spanish Viceroy of Peru, was cured of a violent intermittent fever by drinking an infusion of the bark, and this led to its introduction into Europe. Were the natives themselves acquainted with it? Humboldt answers this question very positively in the negative, and refers the discovery to the

Jesuit missionaries, who, being in the habit of tasting the bark of every tree they hewed down, at length discovered the precious febrifuge. Other authors of repute contend that the virtues of cinchona-bark were known to the Indians long before the advent of the Spaniards; but the question again arises how they first became acquainted with its properties. To account for this, the ridiculous tale has been invented that certain animals, while laboring under fever, happened to gnaw the bark of one of the cinchona-trees, and were cured forthwith. Far more probable is it that some cinchona-trees having been laid prostrate by the tempests in a pool of water, and the latter becoming charged with the medicinal principle, some person laboring under fever drank of this water, was cured, and published the result. But, however this may be, it is certain that the remedy first became popularized in Europe through the agency of Count de Chinchon, Viceroy of Peru, whose wife, as we have said, was cured of intermittent fever by its administration. The new remedy, however, was badly received in France and Italy. The faculty set their faces against it. Physicians who dared prescribe its use were persecuted, and it was only the patronage of Louis XIV which ultimately rendered it popular in France. This monarch, suffering from intermittent fever, was cured by an English empiric named Talbot, by means of a secret remedy. This was no other than cinchona-bark. Louis XIV purchased the secret for the sum of 48,000 livres, and bestowed yearly a pension of 2,000 livres on the Englishman, besides giving him letters of nobility. Three years subsequently the remedy was published. It was a highly concentrated vinous tincture of cinchona-bark. Cinchona-trees grow in the densest forests of Peru and Colombia. The task of discovering them, removing their bark, and conveying the latter to the place of export, is troublesome, difficult, and dangerous. In these forests there are no roads. Frightful precipices intersect the path of the *cascarillero*, or bark-gatherer, across which it is difficult to pass, even while unembarrassed by a load. So soon as the treasure of bark has been secured, these difficulties and dangers proportionately increase, so that the comparatively low price at which cinchona may be procured is in itself a matter of surprise.

As for the maritime movement in 1880-'81, it may be judged of by the entries, which were: sailing-vessels, 1,119, with a joint tonnage of 79,600, and 524 steamers of, together, 661,460 tons.

IMPORTS FROM THE UNITED STATES OF COLOMBIA INTO THE FOLLOWING COUNTRIES (MERCHANDISE ONLY).

YEARS.	United States.	United Kingdom.	France.
1878.....	\$5,848,049	\$4,540,138	\$1,679,100
1879.....	6,390,934	4,506,934	2,682,700
1880.....	2,441,972	4,080,263	5,632,064

## EXPORTS TO COLOMBIA FROM THE SAME COUNTRIES.

YEARS.	United States.	United Kingdom.	France.
1878.....	\$4,495,822	\$5,104,555	\$4,083,700
1879.....	5,525,014	4,400,766	4,308,900
1880.....	5,337,314	5,060,216	5,782,092

In 1881 the United States imported from the United States of Colombia \$5,991,890 worth of merchandise, the United Kingdom \$6,677,505, and France \$5,016,006; while the United States exported to Colombia \$5,383,138 worth, the United Kingdom \$5,999,776, and France \$6,214,345.

The commercial statistics published in Colombia fail to show the export of precious stones, such as topazes, found in the country, of excellent quality and in considerable amounts.

## TRADE BETWEEN COLOMBIA AND THE UNITED STATES, 1869-'82, SPECIE NOT INCLUDED.

FISCAL YEARS.	Net imports from the former into the latter.	Domestic exports from the latter to the former.
1869.....	\$5,111,489	\$4,900,075
1870.....	4,827,481	4,612,861
1871.....	6,109,264	4,182,567
1872.....	6,407,948	4,495,258
1873.....	6,112,279	5,317,001
1874.....	7,518,984	5,123,845
1875.....	12,715,956	4,272,950
1876.....	5,332,842	3,946,442
1877.....	5,862,226	4,022,232
1878.....	6,870,896	4,559,226
1879.....	6,851,206	5,485,687
1880.....	8,914,877	5,867,316
1881.....	5,788,118	5,179,866
1882.....	4,784,040	6,280,916
Total.....	\$92,292,546	\$67,645,692

## IMPORT OF PRODUCTS FROM THE UNITED STATES OF COLOMBIA INTO THE UNITED STATES.

FISCAL YEARS.	Chemicals, drugs, dyes, and medicines of all kinds.	Cocoa, crude, and leaves and shells of.	Coffee.	Hides and skins other than furs.	India-rubber and gutta-percha, crude.	Fruits of all kinds, including nuts.	Brown sugar.	Other merchandise.	Total Import of merchandise.*
1869.....	\$1,058,848	\$207,294	\$178,600	\$460,057	\$534,648	\$17,872	\$966	\$2,226,169	\$4,684,454
1870.....	1,084,851	179,608	180,124	583,805	681,998	38,024	2,377	1,557,986	4,508,728
1871.....	1,300,064	156,796	324,144	738,238	1,143,339	59,944	12,677	1,809,850	5,570,052
1872.....	1,771,630	170,480	408,696	518,179	2,042,359	181,161	6,888	692,479	6,181,372
1873.....	1,386,741	186,580	642,376	551,572	2,638,139	70,635	2,246	300,001	6,146,840
1874.....	1,452,360	198,778	1,168,073	1,127,372	1,978,450	22,971	450	1,519,678	7,363,750
1875.....	1,147,386	150,717	950,976	1,323,680	1,450,562	105,246	1,092	7,154,445	12,284,063
1876.....	1,323,837	84,273	673,880	1,118,333	1,253,248	95,470	4,098	451,689	5,084,273
1877.....	732,045	129,431	948,063	1,033,079	1,570,511	112,836	71,338	426,423	5,023,326
1878.....	1,472,218	116,972	1,022,216	1,401,347	1,006,521	186,151	66,737	625,886	5,848,043
1879.....	1,519,123	205,627	1,354,988	1,293,353	1,047,266	142,175	14,225	754,289	6,380,946
1880.....	1,327,295	875,081	2,018,471	1,775,206	1,909,551	156,184	46,909	838,025	8,441,979
1881.....	503,620	182,406	1,200,358	1,512,298	1,898,744	188,200	42,370	518,899	5,991,890
1882.....	1,108,200	220,221	857,612	1,321,816	767,426	315,261	6,891	869,548	4,961,470

## DOMESTIC EXPORT FROM THE UNITED STATES TO THE UNITED STATES OF COLOMBIA.

FISCAL YEARS.	Wheat-flour.	Coal, bituminous, and other.	Cotton, manufactures of.	Drugs, chemicals, medicines, acids, ashes, and dye-stuffs.	Glass and glass-ware.	Iron and steel, and manufactures of.	Oil, mineral, refined.	Paper and stationery.	Provisions.
1869.....	\$183,772	\$182,918	\$605,498	\$171,959	\$17,096	\$82,282	\$22,346	.....	\$663,577
1870.....	175,071	22,364	800,668	254,630	7,547	1,231,304	34,862	\$24,093	752,568
1871.....	196,146	157,755	266,068	402,091	6,691	831,385	62,474	8,067	707,509
1872.....	243,182	168,229	89,267	279,646	46,371	973,055	48,874	22,973	950,139
1873.....	302,253	148,628	88,225	413,755	52,588	1,265,090	52,405	27,609	868,386
1874.....	317,378	124,443	50,473	257,787	61,832	1,160,458	47,715	43,324	1,025,927
1875.....	202,691	120,094	101,559	271,287	42,450	758,469	38,595	73,229	1,194,360
1876.....	282,529	104,292	108,947	279,000	35,839	688,661	53,873	70,450	874,800
1877.....	174,357	35,310	466,109	266,231	45,558	942,481	44,198	49,573	891,661
1878.....	220,175	66,073	545,017	362,365	79,500	952,281	80,847	71,861	715,504
1879.....	179,720	48,890	664,267	290,841	46,562	1,124,619	29,569	136,449	771,194
1880.....	224,561	61,107	556,692	311,733	39,620	1,322,596	55,213	152,688	604,889
1881.....	223,863	27,902	838,138	289,649	38,660	1,080,983	64,502	147,322	617,893
1882.....	372,099	41,914	627,388	301,411	45,855	1,155,827	35,816	123,115	1,101,501

## IMPORT OF SPECIE INTO THE UNITED STATES FROM THE UNITED STATES OF COLOMBIA, AND EXPORT THEREOF TO THE LATTER.

FISCAL YEARS.	Imports.	Exports.
1869.....	\$607,252	\$847,890
1870.....	497,467	638,465
1871.....	866,724	355,530
1872.....	455,077	335,890
1873.....	262,124	241,913
1874.....	385,676	92,544
1875.....	658,242	66,332
1876.....	463,373	59,232
1877.....	431,087	98,490
1878.....	656,056	197,107
1879.....	856,167	248,440
1880.....	598,683	155,730
1881.....	528,140	231,241
1882.....	429,518	290,540

The first and only railroad finished in Colombia, besides the one from Sabanilla to Barranquilla, twenty-eight kilometres, is the Panama Railroad across the Isthmus, seventy-five kilometres (forty-seven miles), now the property of the Panama Canal Company.

Other railroads authorized to be constructed by the Colombian Congress during several sessions of the past two years are: 1. The Northern, to connect the States of Cundinamarca, Boyacá, and Santander with the Magdalena River; 2. The Cauca Railway, from Cali, on the Cauca River, to Buenaventura, on the Pacific, one hundred and thirty-eight kilometres, of

\* Re-export not deducted.



which thirty-three are in operation; 3. The Antioquia Railroad, from Port Berrio, on the Magdalena, to Medellín in the State of Antioquia, two hundred kilometres, of which sixteen are finished; 4. The Cucuta, to the port St. Buenaventura, on the Tulia River, which flows into the Lake of Maracaibo (Venezuela), one hundred and thirty-eight kilometres, one quarter finished; 5. A small railway between the upper Magdalena and the Honda rapids, soon to be finished; 6. The Bogotá and Girardot Railroad, the latter a village near Honda.

A project is besides on foot to connect by rail the port of Riohacha with the rich coal-mines forming the basin of the river Cesar, in the State of Magdalena; and several short branch-lines to stretch from Bogotá to important points in the Savana, such as Facativa, Cipaquirá, Pandi, and others.

Respecting the Panama Canal, a report, which has just been made to Rear-Admiral Cooper, commanding the North Atlantic station, by Lieutenant Raymond P. Rodgers, of the navy, has the great merit of describing simply, intelligibly, and candidly exactly what has been done toward constructing the canal, and what remains to be done. It differs from the rose-colored generalities of the financial managers of the enterprise on the one hand, and on the other from the depreciatory criticisms and the prophecies of evil set forth by the partisans of the rival routes through Tehuantepec and Nicaragua.

Two years ago, when the vanguard of the construction party arrived at Aspinwall, they not only found no part of their way cleared, but even the proposed line of the canal not certainly fixed, and no houses to live in or buildings fit for the storage of their tools, machinery, and property. What has been since accomplished, as Lieutenant Rodgers makes plain, is the building of wharves at the termini, the erection of workshops all along the line, the setting up of machinery therein, the construction of villages for the workmen and engineers, the definite fixing of the axis of the canal, and the clearance of the route from surface impediments to a width of over 300 feet throughout. Lately the delayed contracts have been completed. It is safe to say that the machine-digging of the canal proper will open with vigor at the beginning of the dry season.

But the details also show that a greater quantity of actual excavation has already been done by manual labor than many people suppose. On the Colon section there has been much dredging for the basin in which vessels about to enter the canal may lie in security. At Gorgona the excavation of the main cut has been begun by hand. Beyond Obispo, 650 men have been for some weeks engaged in the actual work of canal-digging. In the Culebra section, which is the highest point of the route, they have dug down to the proposed full depth

of the canal. In short, it is evident from the observations of Lieutenant Rodgers, that not only reservoirs and railways for carrying off the refuse, besides other important aids, have been thoroughly prepared, and docks, quarters, machinery, and rolling-stock made ready, but in four sections the actual work of digging is going on by manual labor.

The theory of a sea-level canal is to be strictly carried out, in preference to the lock system, which the American naval engineers were inclined to consider less difficult and less costly. Lieutenant Rodgers does not conceal his opinion that the completion of the canal, now announced by Count de Lesseps for the year 1888, will be postponed far beyond that date, and the estimate of cost hitherto given, namely, \$120,000,000, will be very largely exceeded. So confident is Lieutenant Rodgers as to the latter point that, although studiously cautious and apparently unswayed by prejudice throughout his report, he yet concludes that "it seems probable that this will undergo the experience of many other great projects—that the original subscribers must again subscribe or lose their venture, and that new stockholders will be the ones who will share the profits." When it is reflected how much remains to be done, and how long the preliminaries have dragged, it seems likely that the canal will not be open before the year 1890, at the earliest; and, as the statistics of Lieutenant Rodgers show that the sum of \$26,000,000 has already been expended, it is also reasonable to suppose that the original estimate of cost will be exceeded. Still, the existing expenditures include the cost of all the machinery thus far ordered, as well as the purchase of grounds, while about 5,000 men are under constant employ. Besides, the eagerness with which the company's shares were taken up makes it obvious that more money could easily be raised if required, and in any case it would seem possible to enlarge the capital stock instead of calling upon the original subscribers to put in more money.

The Colombian Post-Office forwarded, in 1879-'80, 463,832 letters and 413,350 newspapers, and money to the amount of \$2,283,974, exclusive of 4,920 kilogrammes of gold, and 14,348 kilogrammes of silver.

The length of telegraphs in operation in the country, in 1879-'80, was 2,960 kilometres, (1,865 miles), and the number of telegrams passed over the wires was 150,204.

The foreign hospital at Panama received in 1882 1,154 sick persons, of whom only 76 died; the patients received belonged to thirty-three different nationalities. The municipality of the capital, Bogotá, has asked the Federal Government for aid to the extent of \$20,000, in order to improve its sanitary condition.

Two candidates for the presidency are prominently before the country, ex-President Raphael Núñez, for re-election, and General Solon Wilches.

COLORADO. The following were the State officers during the year: Governor, Frederick W. Pitkin (Republican); Lieutenant-Governor, H. A. W. Tabor; Secretary of State, N. H. Meldrum; Treasurer, Nathan S. Culver; Auditor, Eugene K. Stimpson; Attorney-General, Charles W. Wright; Superintendent of Public Instruction, Joseph C. Shattuck; Adjutant-General, Robert S. Roe; State Librarian, Joseph C. Shattuck. Supreme Court—Henry C. Thatcher, Chief Justice, and Samuel H. Elbert and Wilbur F. Stone, associates.

STATISTICS.—From the county returns to the State Auditor of taxable property, it appears that Lake, Fremont, and Gilpin are the only counties which do not show an increase in their wealth. The increased valuation for the year is \$19,884,357.09. The county values are as follows:

Arapahoe.....	\$34,557,730 00
Bent.....	3,282,011 00
Boulder.....	4,477,050 00
Chaffee.....	2,651,568 00
Clear Creek.....	2,128,209 20
Conejos.....	1,436,298 00
Costilla.....	958,981 48
Custer.....	1,473,528 51
Dolores.....	484,550 00
Douglas.....	1,242,144 00
Elbert.....	1,610,558 00
El Paso.....	4,579,375 00
Fremont.....	2,064,155 00
Gilpin.....	1,343,116 00
Grand.....	425,079 00
Gunnison.....	2,340,956 00
Hinsdale.....	880,460 00
Huerfano.....	1,805,556 04
Jefferson.....	2,747,810 88
Lake.....	4,586,075 00
La Plata.....	2,162,668 00
Larimer.....	8,005,260 00
Las Animas.....	3,001,743 00
Ouray.....	657,588 00
Park.....	1,952,036 00
Pitkin.....	800,940 00
Pueblo.....	7,066,720 00
Rio Grande.....	1,081,716 00
Routt.....	169,350 00
Saguache.....	159,612 00
San Juan.....	624,075 00
Summit.....	1,381,209 00
Weid.....	6,113,395 08
Total.....	\$104,440,688 57

The value of the different items of property is as follows:

	Valuation.
2,642,777 <sup>38</sup> / <sub>100</sub> acres of land and improvements.....	\$18,714,886 00
2,245 <sup>35</sup> / <sub>100</sub> miles of railroad and valuation.....	17,788,153 24
Value of merchandise.....	7,932,912 00
Amount of capital in manufacturing.....	907,921 00
Town and city lots.....	39,187,284 00
74,393 horses.....	3,138,463 00
6,394 mules.....	481,727 50
410 asses.....	5,540 00
423,243 cattle.....	5,435,616 00
706,048 sheep.....	1,141,941 00
4,167 goats.....	4,028 00
4,507 swine.....	24,883 00
3,431 all other animals.....	27,467 00
Musical instruments.....	297,214 00
Clocks and watches.....	299,631 50
Jewelry, gold and silver plate.....	87,815 00
Money and credit.....	3,522,898 25
Carriages and vehicles of all kinds.....	915,936 00
Household property.....	725,226 00
All other property.....	2,366,635 64
Bank and other shares.....	1,201,873 00
Insurance premiums.....	233,223 44
Grand total.....	\$104,440,688 57

The State tax for the year is:

Total valuation as reported.....	\$104,440,688 57
General revenue fund, 4-mill tax.....	417,762 73
Capitol Building, $\frac{1}{2}$ -mill tax.....	52,220 34
Agricultural College, $\frac{1}{2}$ -mill tax.....	20,888 14
Insane Asylum, $\frac{1}{2}$ -mill tax.....	20,888 14
Mute and blind fund, $\frac{1}{2}$ -mill tax.....	20,888 14
School of Mines fund, $\frac{1}{2}$ -mill tax.....	20,888 14
University of Colorado fund, $\frac{1}{2}$ -mill tax.....	20,888 14
Stock-inspection fund, $\frac{1}{2}$ -mill tax.....	6,962 71
Military poll-tax fund, \$1 per poll on 28,776 polls.....	28,776 00
Grand total tax for the State.....	\$610,162 48

The following is a statement of the bullion product for 1881:

Boulder County.....	\$535,482 88
Chaffee County.....	196,400 00
Custer County.....	755,600 00
Clear Creek County.....	2,204,960 84
Dolores County.....	125,000 00
Fremont County.....	14,535 50
Gilpin County.....	2,150,700 00
Grand County.....	10,000 00
Gunnison County.....	535,083 00
Hinsdale County.....	187,375 00
Lake County.....	12,788,902 00
La Plata and San Juan Counties.....	40,000 00
Ouray County.....	78,000 00
Park County.....	350,000 00
Pitkin County.....	120,000 00
Rio Grande County.....	250,000 00
Saguache County.....	53,500 00
Summit County.....	1,828,000 00
Total.....	\$22,203,508 72

On the whole, the mining industry was prosperous during the year. In most of the newer districts a considerable increase of development and production took place. The gross return will be somewhat greater than that of 1881. The yield of the Leadville mines is the greatest ever produced in that section. The San Juan country will give a much larger return than ever before, and the same is expected of Gunnison and Pitkin. Summit will yield about the same as in 1881, Boulder nearly fifty per cent more, while Gilpin and Clear Creek will make a good report. But few sales were made, though several of considerable magnitude were under negotiation at the close of the year. There were no excitements and but few important discoveries, yet the development in all sections continued with more or less energy. The most conspicuous event was the removal of the Grant smelter to Denver, and the erection there of one of the finest establishments of its kind in the world. A material advance in the treatment of low-grade ores has been made by the successful establishment of the Bancroft-Walker process, which will take a prominent part in the affairs of 1883. It is understood that a large part of these mills will be manufactured in Denver.

The product of the Leadville district for the last quarter of the year was as follows: Pounds of lead, 17,009,228; ounces of silver, 1,336,212; ounces of gold, 2,921. Total currency value, \$5,783,127. The total value of the output for the last four years has been as follows:

1879.....	\$10,338,740	1881.....	\$13,170,576
1880.....	14,187,697	1882.....	15,220,598

The population of the State in 1880 was 194,327, of whom 129,131 were males and 65,-



196 females, 154,537 natives and 39,790 foreign-born, 191,126 white, 2,435 colored, 612 Chinese, and 154 Indians. There were 93,608 males twenty-one years old and over, of whom 26,873 were whites of foreign birth; 9,321 persons ten years old and upward, or 5.9 per cent, were unable to read, and 10,474, or 6.6 per cent, were unable to write. There were living in the United States 31,827 persons born in Colorado. The yield of barley was 107,116 bushels; corn, 455,968; oats, 640,900; rye, 19,465; wheat, 1,425,014. There were on farms 42,257 horses, 2,581 mules and asses, 2,080 working-oxen, 28,770 milch-cows, 315,989 other cattle, 746,443 sheep, and 7,656 swine. The number of manufacturing establishments was 599; capital, \$4,311,714; hands employed, 5,074; value of material used, \$8,777,262; products, \$14,260,159.

There are at the present time in the State about 2,250,000 cattle, two thirds of which are well bred; 1,000,000 of these cattle are in the south, along the Arkansas and Purgatory Rivers, and the other 1,250,000 are north of the Divide, along the waters of the Republican, the Platte, and in the North, South, and Middle Parks.

**UNITED STATES SENATOR.**—On the 11th of April, George M. Chilcott was appointed by the Governor United States Senator, in the place of Henry M. Teller, appointed Secretary of the Interior, in President Arthur's Cabinet.

George M. Chilcott was born in Trough Creek Valley, Huntingdon County, Pennsylvania, January 2, 1828. He was reared on a farm, and received a common-school education. In the spring of 1844 he removed with his parents to Jefferson County, Iowa, where he lived, working upon a farm, about two years. He subsequently taught school, and also pursued the study of medicine, until the spring of 1850, after which he located near his father and engaged in farming. In 1853 he was elected, on the Whig ticket, Sheriff of Jefferson County, which office he held one term. In 1856 he removed to Burt County, Nebraska, where he was shortly afterward elected to represent the counties of Burt and Cumming in the Lower House of the Legislature, which met in session at Omaha, in the winter of 1856-'57. Mr. Chilcott started, in the spring of 1859, for the famous "Pike's Peak country," arriving at Denver in the month of May. He engaged in prospecting during the summer and in the fall following he was elected from the town of Arapahoe to the Constitutional Convention, which met at Denver. In October, 1860, he removed to Southern Colorado, now Pueblo County. He engaged in farming during 1861-'62, and in 1863 he located upon a farm of his own, twelve miles east of Pueblo. He served as a member of the Territorial Legislature in the first two sessions of that body. In 1863 he received from President Lincoln the appointment of Register of the United States Land-Office for

the District of Colorado. Mr. Chilcott held the position nearly four years, until he was, in 1866, elected to Congress under the State organization then formed, and which sought admission into the Union. But Congress refused to receive Colorado as a State at that time, and Mr. Chilcott could not take his seat. In 1867 he was elected a Delegate to Congress for the Territory of Colorado, and served one term. It was he who introduced and secured the passage of a bill repealing the act which discriminated against all the territory west of the west line of Kansas and east of the east line of California, by charging letter postage on all printed matter between the two boundaries. Mr. Chilcott was a member of the Territorial Council, and president of that body during the session of 1872-'73. He was also a member in 1874. In 1878 he was elected to the State Legislature from Pueblo County, and during the session of 1878-'79 he was prominently before the Legislature as a candidate for United States Senator, Mr. Hill, however, securing the place.

**POLITICAL NOMINATIONS.**—The Republican State Convention met in Denver on the 14th of September, and on the following day nominated candidates as follows: For Governor, Ernest L. Campbell, of Lake; Lieutenant-Governor, William Meyer, of Costilla; Congress, J. B. Belford, of Gilpin; Secretary of State, Melvin Edwards, of Summit; State Treasurer, Frederick J. Walsen, of Huerfano; State Auditor, John C. Abbott, of Larimer; Attorney-General, D. F. Army, of Pueblo; Superintendent of Public Instruction, J. C. Shattuck, of Weld; Regents of the State University, James Rice, of Pueblo, L. S. Cornell, of Boulder; Judge of the Supreme Court, Joseph C. Helm, of El Paso.

Ernest L. Campbell is a native of Woodford County, Kentucky, thirty-six years old. He was educated in Bethany College, Virginia, Harrodsburg College, Kentucky, the Illinois State University at Jacksonville, Heidelberg University, Germany, and the Wurzburg University, Germany. He is a lawyer by profession, and went to Colorado in 1874. In 1879 he went to Leadville, and in 1881 became President of the Bank of Leadville, which position he still holds.

The Democratic nominees were: For Governor, James B. Grant; Lieutenant-Governor, John R. Prowers; Secretary of State, Frank C. Johnson; Treasurer, Dennis Sullivan; Auditor, Ansel Watrous; Attorney-General, B. F. Montgomery; Superintendent of Public Instruction, Frank M. Brown; Regent of the University, J. M. Vanauken; Judge of the Supreme Court, Vincent D. Markham; Congressman, S. S. Wallace.

The Greenbackers nominated for Governor, George W. Woy; Lieutenant-Governor, Theodore O. Saunders; Secretary of State, William N. Bachelder; Treasurer, John L. Herzinger; Auditor, Amos K. Frost; Attorney-General,

Alvah H. Breman; Superintendent of Public Instruction, Mrs. A. L. Washburn; Regents of the University, Seth Terry and William J. Lynde; Judge of Supreme Court, L. F. Hollingsworth; Congressman, Leland W. Green.

**ELECTION RETURNS.**—The election in November resulted in the choice of a Democratic Governor and of Republicans for most of the other offices. The vote in most cases is not officially determined until the meeting of the Legislature in January. Unofficial figures, for Governor, from all but one county, with the reported majority in that, give 29,897 for Grant and 27,552 for Campbell; Democratic majority, 2,345. The following is the declared result for Congressman, Judge of the Supreme Court, and Regents of the University:

Congressman.	Judge.	Regents.
Belford..... 30,347	Helm..... 30,835	Rice..... 32,427
Wallace.... 29,080	Markham.... 29,819	Cornell..... 32,001
Green..... 1,195	Hollingsworth. 1,200	Vanauken.. 27,921
		Lynde..... 1,222
		Terry..... 1,389
Scattering.. 42	Scattering..... 9	Scattering.. 6
Rep. plurality 1,767	Rep. plurality.. 516	Rep. plur... } 4,506 } 4,030

A constitutional amendment, increasing the salaries of the Governor and Judges of the Supreme Court, was adopted at the same election, the vote being 32,861 for, and 8,838 against. The new Legislature will stand:

LEGISLATURE.	S. vote.	House.	Joint ballot.
Republicans .....	17	36	53
Democrats .....	9	13	22
Republican majority....	8	23	31

A Mining and Industrial Exposition was held in Denver in August.

**COMMERCE AND FINANCE, AMERICAN, IN 1882.** A series of disasters befell the country in 1881 which reduced the accumulation of national wealth almost to the vanishing-point. In the severe winter of 1880-'81 great numbers of cattle perished on the Plains. Snow-storms entailed heavy expenses on the transportation companies. The crop of winter wheat was a failure. The parching summer of 1881 caused a deficiency in spring wheat and the other cereals. Corn alone fell five hundred million bushels below the previous crop. Finally, the cotton-crop was a million and an eighth bales less than the product of the season before, and inferior in quality; yet the losses were still within the amount of the exportable surplus, and, coming after years of unusual production, did not check the consumptive demand, and consequently produced no contraction in the general industrial and mercantile business of the country. The effects were, however, serious, though they did not amount to a general commercial depression. The consequences were not developed until 1882. Industrial expansion was arrested in certain directions, particularly in railroad-building and the dependent industries. The general rise in wages con-

sequently stopped short. The prices of the necessities of life at the time became much higher. The discontent of the laboring people, and their extensive and mostly unsuccessful strikes, were the most conspicuous economical features of the year. This state of things continued until the abundant harvests of 1882 caused the prices of food to fall, and relieved the working class from the chief cause of their distressed position. The imports did not begin to decline in response to the shortage in the crops and the diminished exportation during the fiscal year 1881-'82. The revenues of the Government were larger than ever before. The accumulation of a surplus in the Treasury, and the disposal made of it by Congress, aroused a popular demand for the remission of taxes and stimulated the free-trade agitation. The import trade would speedily have caught a fresh impulse from the harvests of 1882, which were as abundant as those of the previous year were deficient; but the uncertainty of the action of Congress caused a partial cessation of operations in all branches of business which would be directly affected by tariff or internal revenue reductions. The stagnation in the tobacco industry and in many other departments, and subsidence in the import trade, were the most noteworthy incidents of the later months of the calendar year. Production and importation had been overstimulated, and stocks had accumulated somewhat in advance of the consumptive demand. Low prices and small profits gave difficulty to the manufacturers and traders in 1881-'82 as dear living did to the workmen. A reaction would have come, which would be greater on account of the falling off in the demand when the losses of 1881 began to be felt; but it was precipitated and exaggerated by the uneasy anticipations of congressional action.

The mania for speculation, which, within a few years, has extended to the staple products of the country, reached an unprecedented height in 1881-'82. With short crops of grain, rings of speculators in Chicago commenced manipulating prices and engrossing supplies. The price of wheat was driven above the exporting point, and European customers supplied their wants from elsewhere. The shipping which visited New York for grain-cargoes deserted that port. American millers were obliged to pay more than normal prices for grain, and the bread of the people was thus made dearer. At the close of the crop-year there was a large stock of wheat remaining. The corners were continued through the first half of 1882, and even when the crop of 1882 was assured, wild and contradictory reports being spread to influence prices. In the final collapse many banks and business houses were dragged down with the losing party of the gamblers. The unsatisfactory slowness with which the new crop of 1882 was exported after the harvest is attributed to the influence of the late speculations.



There was a corner in wheat for July delivery at Chicago, by which the price was run up to \$1.35 a bushel. The losers appealed to the arbitration committee of the Chicago Exchange, which decided that they must settle at the price which the buyers were able to fix. The

St. Louis Exchange shortly before decided that contracts should be settled at a price even below what the sellers were willing to agree to.

The difference in the commercial conditions of the two years is shown in the following table:

ARTICLES.	1881.	1882.
Coin and currency in United States November 1st.....	\$1,455,681,000	\$1,488,888,554
Total clearings in twenty-three cities.....	64,332,000,000	61,543,000,000
Mercantile failures.....	81,155,382	101,547,564
Imports of gold and silver (eleven months).....	65,514,598	19,182,900
Exports of gold and silver (eleven months).....	18,308,432	54,000,489
Imports of merchandise (eleven months).....	612,871,846	693,310,224
Exports of merchandise (eleven months).....	756,487,485	675,021,019
Excess of exports over imports.....	143,615,639	18,289,205
Excess of imports over exports.....	9,400	11,000
Railroads constructed (estimated), miles.....	\$224,980,851*	\$257,172,180*
Gross earnings fifty-four railroads (eleven months).....	380,000,000	510,000,000
Wheat raised (estimated), bushels.....	1,194,000,000	1,635,000,000
Corn raised (estimated), bushels.....	5,435,845	7,000,000
Cotton raised, 1882 (estimated), bales.....	4,461,000	29,250,000
Pig-iron, tons.....	28,500,000	705,259
Anthracite coal, 1882 (approximated), tons.....	682,455	
Immigration (eleven months).....		

The prices of the leading staples on or about the 31st of December for three years were as follows:

MERCHANDISE.	1882.	1881.	1880.
Cotton, middling uplands, per pound.....	10 $\frac{1}{2}$ c.	11 $\frac{1}{2}$ c.	11 $\frac{1}{2}$ c.
Wool, American XX, per pound.....	85c. @ 48c.	87c. @ 45c.	87c. @ 48 $\frac{1}{2}$ c.
Iron, American pig, No. 1, per ton.....	\$25 00 @ \$26 00	\$25 50 @ \$27 00	\$24 00 @ \$26 00
Wheat, No. 2 red winter, per bushel.....	\$1 09 $\frac{1}{2}$ @ \$1 10 $\frac{1}{2}$	\$1 41 $\frac{1}{2}$ @ \$1 43 $\frac{1}{2}$	\$1 17 $\frac{1}{2}$ @ \$1 18 $\frac{1}{2}$
Corn, Western mixed, per bushel.....	59c. @ 67c.	65c. @ 71c.	54c. @ 58c.
Pork, mess, per barrel.....	\$18 87 $\frac{1}{2}$ @ \$18 50	\$17 50 @ \$19 50	\$14 00

**FOREIGN COMMERCE.**—The returns of the exports and imports for 1882 present a remarkable contrast to those of the preceding year. This was wholly due to the diminished exports of breadstuffs, cotton, and provisions. Petroleum was the only one of the great staples which showed an increase. The three classes named constituted nearly three quarters of the total exports in 1880-'81. The total exports decreased from \$883,925,947 in 1880-'81 to \$733,073,937 in 1881-'82, over \$150,000,000 less. In the three leading staples the falling off was still greater, as shown in the following table:

EXPORTS.	1881.	1882.
Breadstuffs.....	\$263,561,091	\$176,977,496
Provisions.....	145,622,078	112,595,714
Cotton.....	247,695,746	199,512,644
Total.....	\$658,873,915	\$489,685,854

For the eleven months ending November 30th, the total exports were \$675,021,019, against \$756,487,485 for the same period in 1881, and the imports \$693,310,224, against \$612,871,846, changing an excess of exports of \$143,615,639 into an excess of imports of \$18,289,205. But, for the last five of the eleven months, there was again a favorable balance of \$21,147,825, nearly half as much as for the corresponding period in 1881. The exports in November were heavier than in any month since March, 1881. The large total was due to the heavy shipments of cotton, of which over 700,000

bales were exported. In December the cotton movement reached still greater proportions, more than 750,000 bales being sent out. The exports of breadstuffs amounted to \$165,606,693 for the eleven months, against \$210,318,432 for the same period in 1881. Nearly as much wheat was shipped as in the previous year, the export amounting to 100,345,387 bushels, valued at \$114,441,885, as against 109,814,650 bushels, valued at \$128,318,378; but the corn export was less than one fifth as great in quantity, amounting to 13,057,940 bushels, valued at \$9,944,652, as against 70,263,464 bushels, of the value of \$42,266,154. Indian corn finds a certain demand in Europe, principally for stock-feeding purposes in England. When the supply is insufficient for the domestic requirements, the foreign consumers compete for it until, as in 1882, the price approaches that of wheat. The exports of provisions for the eleven months were in value \$84,863,003, against \$120,345,092 in 1881. In hog products there was a decrease of over 37 $\frac{1}{2}$  per cent, nearly 350,000,000 pounds. During the eleven months of 1882 there was a net export of specie of \$34,817,589, against a net import in 1881 of \$47,211,166 for the eleven months. More than half of this came in the last five weeks of the period. There was still a small export of gold at this time in 1882, but with the export movement of grain retarded, and the prospect of a turn in the current at the opening of the new year. The foreign trade movement for each of the eleven months was as follows, in thousands of dollars:

\* Mileage November 30, 1881, 42,160; in 1882, 46,636.

1882.	MERCHANDISE.			GOLD.			SILVER.		
	Exports.	Imports.	Excess of exports.	Imports.	Exports.	Excess of imports.	Exports.	Imports.	Excess of exports.
January.....	64,921	56,956	7,965	1,184	102	1,082	2,182	584	1,648
February.....	56,607	58,827	+2,220	469	7,231	*6,762	1,552	681	921
March.....	62,614	68,604	+5,990	840	8,229	*2,389	1,527	621	906
April.....	57,952	66,361	+8,409	551	2,348	*1,792	1,054	1,055	+1
May.....	49,179	68,350	+19,171	204	18,289	*18,085	1,778	611	1,167
June.....	51,078	62,690	+11,612	257	5,572	*5,315	1,327	817	510
July.....	54,018	65,894	+11,876	162	4,755	*4,593	1,056	420	1,286
August.....	62,714	65,719	+3,005	425	1,897	*1,882	1,488	722	766
September.....	62,815	69,409	+6,594	1,186	230	906	1,188	512	676
October.....	71,548	61,435	10,113	8,896	104	8,792	608	277	881
November.....	80,975	55,155	25,820	2,242	58	2,189	926	1,727	+601
Total.....	675,021	698,810	+18,289	11,256	88,715	*27,459	15,286	7,927	7,859

AGRICULTURAL EXTENSION.—The settlement of new lands, particularly in the Northwest, is an important factor in the prosperity of the country. The occupation of new lands in the fiscal year 1881-'82 greatly exceeded the takings of any previous year. Previous to 1878 the aggregate annual disposals of Government lands under the homestead and timber-culture laws and for cash, ranged between three and five million acres. In that year an increased movement began. The takings in 1877-'78 amounted to 7,168,334 acres; in 1878-'79, to 8,650,219 acres; in 1879-'80, to 9,166,918 acres; in 1880-'81, to 8,379,618 acres; and in 1881-'82, to 12,526,262 acres. Of the latter total, 4,355,039 acres were in Dakota, and 1,085,737 acres in Minnesota, Kansas coming next with 904,061 acres, and Nebraska with 884,028 acres. Railroad lands in the Northwest, which are sold at from four to six dollars an acre, were taken in 1882 in largely increased quantities, the Northern Pacific disposing of 175,772 acres in Dakota and Minnesota, and the St. Paul, Minneapolis and Manitoba Company of 203,143 acres.

CEREALS AND PROVISIONS.—A general crop failure has been regarded as an impossibility in the United States, a country of such broad extent and varied climate. The crop year 1881-'82 showed a deficiency everywhere east of the Rocky Mountains. The season's yield of Indian corn was 1,194,916,000 bushels, against 1,717,434,000 bushels in 1880-'81. The wheat-crops fell off from 498,549,000 to 380,280,000 bushels, a decrease of 118,269,000 bushels. The cotton yield was 1,154,000 bales less, or 5,435,000 against 6,589,000 bales. Pork products in the West decreased from 1,551,331,000 to 1,250,000,000 pounds, or 301,331,000 pounds in meat products, and from 400,976,000 to 297,500,000 pounds, or 103,476,000 pounds in lard. The value of merchandise exports showed a falling off in the fiscal year 1881-'82 of \$151,835,000, nearly 17½ per cent. The yield of the crop-year 1882-'83 is fully as abundant as that of 1880-'81. The wheat-crops are reported to be over 500,000,000 bushels. Corn is estimated by the Agricultural Bureau at 1,680,000,000 bushels, and by other authorities as high as 1,800,000,000

bushels. The cotton-crop is estimated at from one to two million bales greater than in 1881-'82. In cattle and hog production the dearth of 1881-'82 is still felt, but in another year the conversion of the corn into pork will be shown in the provision-trade.

It is estimated that the country produced 440,000,000 bushels more of corn, 130,000,000 bushels more of wheat, and 1,560,000 more bales of cotton in 1882 than in 1881.

Flour has only recently become an important item among American exports. The shipments grew from 2,000,000 barrels in 1868 to 4,000,000 in 1876, and 8,000,000 in 1881. In 1881-'82 they reached from nine to ten million barrels. When flour was shipped in barrels it could not command a market. In sacks it comes in a form of package to which the European consumers are habituated, while the sacks can be baled and returned to be used again, instead of being a dead loss as were the barrels. They also weigh about twenty pounds less, and can be packed more closely in cars and steamships. The quality of American flour shipped abroad is more even and much superior to that sent formerly. The millers of Minneapolis have taken pains to establish a reputation for their brands in England, and are succeeding in overcoming the old prejudice against American flour. They buy up all the choice grades of spring wheat, which can be obtained in Europe in no other form than in their "patent" or roller-ground flour, a product which English millers can not equal. With freight rates to Liverpool almost as low as are ordinarily paid on either the rail or the steamship alone, and with agents in the principal towns of Great Britain, they reap the full advantage of their unlimited water-power.

The total number of swine slaughtered during the regular pork-packing season of 1881-'82, that is between November 1st and March 1st, was reported by the Cincinnati "Price Current" as 5,747,760, a decrease of 1,171,696 from the preceding winter. Summer packing was formerly insignificant, but with ice and refrigerating appliances, it has attained dimensions which practically obliterate the old limits of the season. In 1881 it numbered 4,803,699 swine, against 5,323,893 in 1880, making the packing for the whole year 10,551,-

\* Excess of exports.

† Excess of imports.



449, a decrease of 1,691,905. The smaller supplies of 1881-'82 caused an advance in price which was carried to the highest point by speculative forestallers of the market. The gross cost in the winter was \$7.58 per 100 pounds, against \$5.80 the preceding season. In the beginning of the summer-packing season of 1882 the expectations of a short supply were not realized, for more hogs, and of greater weight than the preceding spring, were sent to market.

**COTTON.**—The cotton-crop of 1881-'82 was 5,435,845 bales. The exports amounted to 3,595,031 bales, and the takings of American spinners to 1,661,206 bales; leaving a stock on hand on the 1st of September of 120,722 bales. The crop of 1880-'81 reached 6,589,329 bales; the stock on hand, September 1, 1881, 212,233 bales. The movement of the crop compared with the previous season was as follows: shipped to Great Britain, 2,311,790 bales, against 2,843,957; to Channel ports, 80,060, against 56,210; to France, 381,186, against 556,344; to other foreign countries, 821,995, against 1,139,768; total exports, 3,595,031, against 4,596,279; shipments from Tennessee, etc., direct to manufacturers, 477,481, against 510,239 bales; manufactured in Southern mills, 238,000, against 205,000; shipped overland, 1,134,788, against 1,090,067. The overland movement had increased very greatly in the three years preceding 1881, but in that year, with an increase in the crop of 14.25 per cent, the rail shipments were 7.71 less than the year before. In 1882, although the crop was 17.50 per cent smaller than the previous years, the quantity shipped overland was 4.10 per cent greater. The average weight of bales in 1881-'82 was 475.67 pounds, against 485.88 pounds in 1880-'81. The crop was of high average quality, dry and clean.

The Sea Island crop was 38,552 bales, against 36,442 in 1880-'81, and 26,704 in 1879-'80. Florida and Georgia produced more and South Carolina less than the previous season. American spinners consumed 14,762 bales of this staple, 3,492 bales more than in 1880-'81; the exports were 24,756 bales, against 24,395 in 1880-'81.

The new crop of 1882 was about two weeks late in planting, and continued backward till the harvest. The planting was large, and the season remarkably favorable and free from drought or caterpillars, and with less shedding than usual. The boll-worm did considerable damage, however, west of the Mississippi. Although the growth was excessively vigorous, the plants matured well. Frosts were later than usual, but prevented a portion of the bolls from ripening in the northern part of the cotton belt. The weather of the picking season was exceptionally favorable. The December report of the Bureau of Agriculture makes the approximate size of the crop of 1882-'83 6,700,000 bales of 460 pounds.

The takings of Northern spinners were

1,661,206 bales, against 1,686,804 in 1880-'81. The consumption for the year is estimated at 1,986,206 bales: 1,748,206 bales in the Northern and 238,000 bales in the Southern mills. The estimated consumption of 1880-'81 was 1,855,000 bales. For the manufacturers of printing cloths at least the year was an unsatisfactory one. The mills were kept in operation during the whole crop year, except slight stoppages on account of strikes at Cohoes and Fall River. The increased consumption was far short of the enlarged capacity of the mills. There were about 575,000 new spindles added during the year; new and improved spindles were largely introduced, which raised the average capacity per spindle to, perhaps, 67 pounds in the Northern and 153 pounds in the Southern mills. In the census year their capacity was estimated by E. Atkinson at 65.83 pounds North and 149.77 pounds South. The total number of spindles in this country on the 1st of September is estimated at about 12,000,000. The speculation in cotton placed the manufacturers at a disadvantage. One effect of the speculation which prevailed in 1881-'82 was that the price of American cotton was lower during the whole year in Liverpool than it was to American spinners. Wages had risen considerably since 1878. The manufacturers, to preserve their margin of profit, resorted to a reduction of wages, although the cost of living had recently been greatly enhanced. As soon as the crop of 1881-'82 was estimated in the fall of 1881, and known to be only about 4,500,000 bales, speculators took possession of the cotton market. Southerners particularly were confident that a cotton famine would result, and many expected the price to go up to twenty cents a pound. Contracts for future delivery were taken without limit. The English dealers and manufacturers had enough on hand to defer their purchases until they had tired out the speculators. The corners consequently broke down in the spring. A few months later, when the world's stock was really running very low, speculation rose to a still greater height.

Altogether the cotton market suffered almost as much as the wheat export and milling trades from the disturbing effects of speculative gambling; although the foreign trade could only be retarded, not permanently lost, as when the export of surplus breadstuffs is interfered with. The price of middling uplands was forced up to 13 cents by a corner during that interval between the old crop and the new, which is the usual opportunity of speculators. From that price, in July, it fell to 10½ cents when the new crop began to move, and between the 1st of September and the last of December the exports exceeded those of the previous year by over 500,000 bales. Many of the cotton-mills were obliged to close, or work part time.

Notwithstanding improved machinery, and wages so low that the cost of labor per pound of cotton cloth, when genuine, is no higher

than in Manchester, the export trade in 1881-'82 actually receded. The quantities of cotton manufactures exported for the last four years,

ending June 30th, with their values, were as follows:

EXPORTS.		1882.	1881.	1880.	1879.
Colored goods	yards	29,525,672	63,184,293	37,758,166	45,116,058
	value	\$2,326,319	\$4,983,312	\$2,956,760	\$3,209,285
Uncolored goods	yards	114,994,402	80,399,154	68,821,567	84,031,319
	value	\$9,351,718	\$6,624,374	\$5,834,541	\$6,288,181
Other manufactures of cotton, value		1,534,947	1,963,601	1,190,117	1,856,534
Total value		\$18,212,979	\$13,571,287	\$9,961,418	\$10,858,950

The British exports of cotton manufactures are nearly thirty times those of the United States, amounting, for the calendar year 1881, to \$395,000,000.

The European consumption was about 6,786,000 bales, of 400 pounds, against 6,528,000 in 1880-'81, and 6,075,000 in 1879-'80. The large increase in 1880-'81 was due to the poor quality of the crop. Some of that year's cotton was so damp and sandy that it only brought 2*d.* and 3*d.* a pound in Liverpool. Ellison estimates the European imports for 1882-'83, on the basis of an American crop of 6,800,000 bales, as follows: Imports from the United States, 4,500,000 bales; from the East Indies, 1,450,000 bales; from other countries, 950,000 bales; total imports, 6,900,000 bales. The stock on hand, October 1st, was estimated at 771,000 bales, making the total supply 7,671,000 bales, of which 6,563,000 will be delivered for consumption, and 1,078,000 remain in store on October 1, 1883. The number of spindles in Europe, the United States, and India, in 1882, were as follows: Great Britain, 41,000,000; the Continent, 21,855,000; the United States, 12,000,000; India, 1,620,000; total, 76,475,000, an increase of 1,684,000 since the preceding year.

**PETROLEUM.**—The export of petroleum in 1881-'82 rose to about \$50,000,000, an increase of \$12,000,000. The total value of the produce of the wells, since the first one was sunk in 1859, is estimated at \$1,500,000,000. This addition to the wealth of the country has been mainly contributed by the foreign consumers. China, Japan, and India have become as steady customers for American oil as Germany and England. Vast quantities are sent to the Mediterranean. There is hardly a country in which this illuminant is not used. America is the only important accessible source at present. The yield last year was nearly 27,000,000 barrels. The consumption is about 71,000 barrels a day. The production in the early part of the year was about 80,000 barrels daily. There was a stock on hand of about 30,000,000 barrels in the summer. Although the oil-fields of Pennsylvania have several times appeared to be at the last limit of the supply, new wells have been struck each time when the stock was running low. With an increasing demand, which would not fail if the price were several times as high, and with the production constantly declining, until a new discovery

gluts the market, oil is one of the most tempting subjects for speculation and corners, and one of the most disappointing hitherto, for each new discovery has proved richer than the preceding. Since the establishment of the pipeline and common reservoirs, the facilities for speculative dealings are complete. The Pipeline certificates are as easily exchanged as bank-notes. There are Oil Exchanges at New York, Philadelphia, and Pittsburg, and at Titusville, Oil City, Bradford, and Warren. The depth and extent of the oil-producing rock are well known, and the time is approaching when the world must look to the Caucasus, China, or some field yet unknown for its rock-oil. From 1866 till 1872, when the now exhausted wells in Venango County and along Oil Creek were the source of supply, the price was \$4 or \$5 a barrel. Since the discovery of the Butler County field, in the latter year, production has generally exceeded consumption. When the Butler wells began to run dry, the Clarion County deposits were struck, with the famous Bullion wells, pouring out 2,000 and 3,000 barrels a day each, and driving the price down to \$1.50 a barrel. The Clarion fields were soon exhausted; but immediately the Bradford deposits, the richest ever known, were discovered. These lasted five years, and swelled the production to sometimes 100,000 barrels a day, fully double the consumption. In May, 1881, when the Bradford wells were rapidly declining, oil was struck in Alleghany County, N. Y. The summer of 1882 was one of the most memorable in the history of petroleum speculation. In the spring the new wells at Richburg, N. Y., began to fail. The price of oil was 80 cents on April 1st, but was rising rapidly toward \$1 a barrel. Speculation was excessively active. Future contracts were dealt in to enormous amounts. On May 18th a well was struck in another new district in the forests of Warren County, Pa. The oil-bearing rock was pierced by the drill at the depth of 1,612 feet, in Cherry Grove Township, Warren County. Other wells were found in the same locality which yielded from 2,000 to 3,000 gallons a day, bringing the production up to 25,000 barrels daily in the new district and 105,000 barrels for the entire oil-regions at its highest point in August. The price fell to 50 cents, the lowest quoted since 1874. The owners of the new springs showed the characteristic feverish haste to realize, exploding nitro-



glycerine cartridges at the bottom of the wells when the flow diminished. In September the Cherry Grove wells suddenly declined, reducing the daily production by 25,000 barrels. For the first time in five years it approached the consumptive demand. A speculative excitement followed, which transcended all former limits. The sales in September in the exchanges of the oil districts, where the largest transactions took place, amounted to as much as the whole existing stock multiplied several times. The price rose above \$1 a barrel. With an immense stock on hand, such prices could not be sustained, notwithstanding the failing supply. When the bubble burst, and the price receded to 80 cents, thousands of speculators were ruined, business firms all over the country embarrassed, and three banks obliged to close. The extreme range of prices during the year was from 87 cents in February to less than 50 cents in June, then to \$1.46 in November, and back to 75 cents in December. The field for future discoveries of petroleum is probably limited to Warren and Forest Counties, Pa.; Butler, Armstrong, Clarion, Venango, Crawford, and Bradford Counties being nearly exhausted of their deposits, and the territory in McKean County and New York State thoroughly explored.

**IRON.**—The production of iron and steel in the United States, in 1881, was reported by the Secretary of the Iron and Steel Association as follows: Production of pig-iron, in net tons, 4,641,564, including 21,086 tons of spiegel-eisen; production of all rolled iron, including nails and excluding rails, 2,155,846 tons; Bessemer-steel rails, net tons, 1,330,302; open-hearth steel rails, net tons, 25,217; iron and other rails, net tons, 488,581; production of iron and steel street-rails, included in above, 21,554; crucible-steel ingots, net tons, 89,762; open-hearth steel ingots, net tons, 146,946; Bessemer-steel ingots, net tons, 1,539,157; blister and patent steel, net tons, 3,047. Production of all kinds of steel, net tons, 1,778,912. Production of blooms from ore and pig-iron, net tons, 84,606. The imports during the year were, in value, \$61,555,078; exports, \$15,782,282.

The iron business is peculiarly subject to fluctuations, owing to its dependence on railroad-building, and to the fitful way in which railroad extension takes place. In 1881 commenced the greatest era of railroad construction which the country has seen, but the one of the shortest duration. In 1882 there were over 11,000 miles of railroad built, more than in any previous year. In the spring a great strike of the iron-workers for higher wages was started at Pittsburg, Pa., and extended to all the iron-producing districts. For over three months, more than 100,000 men were kept out of work. But the fever for railroad extension had already subsided, and the wants of the lines under way were in great part supplied. The dissatisfied workers lost the con-

test. The powerful trade organization of iron and steel workers was broken up. Before the year ended this great branch of industry began to languish. Rails were sold in large quantities for \$38 a ton, the lowest price ever reached. In December hundreds of establishments were closed, or running on half-time.

The production of coal was reported for the year 1880 as 28,646,995 net tons of anthracite, and 42,420,580 tons of bituminous. In 1881 the anthracite product amounted to 28,500,016 gross tons.

**THE MONEY MARKET.**—Notwithstanding the expansion of the currency, the demand for money was so active in 1882 that the average rate of interest rose perceptibly during the year. The diminution in the volume of the currency from exports of gold was more than restored by the silver certificates which represented the silver dollars which had accumulated in the Treasury since their coinage was begun, and were now added to the circulation by this device. The Secretary of the Treasury endeavored to return to circulation the surplus accumulating from taxes as rapidly as possible, and his payment of bonds and other transactions he conducted with regularity, so as to disturb business as little as possible. In October and November there was great stringency in the money market, which was increased by the manipulations of bank funds by stock operators, but relieved, as far as it was due to this cause, by the accelerated payment of called bonds by the Treasury. In December the market was easier.

In January, 1882, the inflow of gold, which began on a large scale in 1879, and had continued without interruption since, ceased, and in February a contrary movement began which continued until August. During this period \$34,000,000 net were exported from the country. In September, although the balance of trade was still heavy against the United States, the draughts against future shipments and the purchase of American securities abroad turned the tide. Nearly a million was received in that month from the West Indies and Mexico on English account, and about \$3,750,000 in October. Small consignments arrived later from Europe, but, owing to the return of some speculative securities and of called United States bonds, exchange wavered for the remainder of the year about the gold-importing point.

The rapid payment of the Government debt endangered the note circulation of the national banks. The process could not go on as rapidly in the latter half of the year 1882-'83, since by the 1st of December about \$85,000,000 of the estimated surplus income for the year had been already thus applied, leaving only \$35,000,000 for bond redemption up to June 30, 1883. Comptroller Knox suggested three ways of enabling the banks to continue their circulation: 1. Reducing the interest on the 4 and 4½ per cents by paying or compounding the

premium, and then issuing circulation to the amount of 90 per cent of the par value. 2. That the law be amended so that notes may be obtained to within 10 per cent of the market value of the bonds, with a provision for an additional deposit in case of depreciation. 3. That the tax on circulation be reduced to an amount sufficient to simply cover the expenses of the Treasury incident to the issue of these notes. The Beck law against the over-certification of checks was directed against a profitable branch of the business of New York banks. Upon the opinion of the Attorney-General that the "acceptance" of overdrawn checks was an evasion of the law, several of the largest national banks of New York city prepared before the new year to retire their circulation, which was but slightly profitable, owing to the contracted supply and high prices of United States bonds, to resign their charters, and to reorganize as State banks.

The national banking system has many enemies, but Congress passed without hesitation the bank extension act which was necessary in order to enable those banks organized under the first banking laws to continue their existence. The act contained a provision for the exchange of the five per cent Government bonds continued temporarily as three and a half per cents for three per cent registered bonds, also redeemable at the pleasure of the Government, but only after all bonds bearing a higher rate of interest which may be payable have been redeemed. Of these three per cent bonds, those which are last issued are to be paid off first, and the earliest issued called in last.

The total amount of coin and currency in the country at the date of resumption, and on each 1st of November subsequent, as estimated by the Comptroller of the Currency, was as follows:

CURRENCY.	Jan. 1, 1879.	Nov. 1, 1879.	Nov. 1, 1880.	Nov. 1, 1881.	Nov. 1, 1882.
Gold coin.....	\$278,310,126	\$355,631,532	\$453,582,692	\$562,568,971	\$567,105,456
Silver coin.....	106,573,803	126,009,537	158,320,911	186,087,365	212,824,335
Legal-tender notes.....	346,681,016	346,681,016	346,681,016	346,681,016	346,681,016
National-bank notes.....	823,791,674	887,181,418	843,584,107	860,344,250	862,727,747
Totals.....	\$1,055,856,619	\$1,165,558,503	\$1,802,718,726	\$1,455,681,602	\$1,488,588,554

The gold production of the year ending November 1st is reported as \$43,359,021. During the year there was a net export of \$36,122,536. Taking the amount used in the arts as \$2,700,000, there remained \$4,536,483 to be added to the gold currency. From the date of resumption to November 1, 1882, there was a total excess of imports of gold over exports of \$161,-

311,578. The total product of the mines for the same period is estimated at \$147,509,021. The total amount of standard silver dollars coined up to November 1, 1882, was \$128,329,880.

The amounts of gold, silver, and paper currency in sight at the same dates as above were as follow:

MONEY IN SIGHT.	Jan. 1, 1879.	Nov. 1, 1879.	Nov. 1, 1880.	Nov. 1, 1881.	Nov. 1, 1882.
GOLD.					
In the Treasury, less certificates.....	\$112,703,342	\$156,907,986	\$188,679,349	\$167,781,909	\$148,495,473
In national banks, including certificates.....	35,039,201	87,187,298	102,851,082	107,222,169	94,127,324
In State banks, including certificates.....	10,987,812	12,171,292	17,102,130	19,901,491	17,892,500
Total gold.....	\$158,680,355	\$206,266,516	\$253,632,511	\$294,905,569	\$260,455,297
SILVER.					
In the Treasury, standard silver dollars.....	\$17,249,740	\$32,115,073	\$47,156,588	\$66,576,973	\$92,414,977
In the Treasury, bullion.....	9,121,417	8,824,931	6,185,000	8,424,575	4,012,508
In the Treasury, fractional coin.....	6,048,194	17,854,827	24,635,561	25,934,657	26,749,432
In national banks.....	6,460,567	4,986,492	6,495,477	7,112,567	8,294,739
Total silver.....	\$38,879,908	\$58,780,823	\$84,472,626	\$108,095,207	\$131,411,701
CURRENCY.					
In the Treasury, less certificates.....	\$14,425,655	\$21,711,376	\$18,221,826	\$22,774,880	\$26,224,248
In national banks, including certificates.....	126,491,720	118,546,969	86,439,925	77,630,917	92,549,767
In State banks, including certificates.....	25,944,485	25,355,260	23,828,794	27,919,817	27,086,432
In savings-banks.....	14,513,779	15,890,921	17,072,680	11,782,248	14,724,978
Total currency.....	\$211,375,639	\$181,698,946	\$147,563,225	\$139,579,807	\$160,580,475
Grand totals.....	\$408,985,902	\$446,741,285	\$485,668,362	\$537,588,083	\$552,447,473

Deducting these totals from the amounts computed as the total stock in the country, the

amounts held by the people at each date are approximately determined as follows:

IN THE HANDS OF THE PEOPLE.	Jan. 1, 1879.	Nov. 1, 1879.	Nov. 1, 1880.	Nov. 1, 1881.	Nov. 1, 1882.
Gold.....	\$119,629,771	\$149,415,016	\$200,250,181	\$267,668,402	\$306,650,159
Silver.....	67,693,695	67,223,714	78,348,285	82,989,158	80,912,684
Currency.....	450,097,051	502,168,488	542,951,898	567,445,959	548,828,258
Totals.....	\$646,420,717	\$718,512,218	\$817,050,864	\$918,045,519	\$936,391,051



It thus appears that the people increased their hoardings of gold between November 1, 1881, and November 1, 1882, about forty millions, and decreased their hoardings of silver about two millions and their hoardings of currency about nineteen millions.

A new kind of currency was introduced in October. Gold certificates were issued on the deposit of gold in the Treasury at Washington or the sub-Treasury at New York. Bankers hastened to make the Government vaults the repository for their gold. The Bank of America, however, still kept the reserves of the Clearing-House banks. Within a month, nearly \$30,000,000 of the gold certificates were in circulation. The greater part of the customs dues were paid with this more convenient medium. This threatened to cut off the source from which the Treasury reserve held against the greenback circulation was kept, as the law contained no provision for the cancellation of certificates received by the Treasury, and only imperfectly guarded against the danger by directing the Secretary to cease issuing new ones after the reserve has sunk below \$100,000,000.

The increase in the circulation of standard silver dollars between November 1, 1881, and November 1, 1882, was less than a million and a half of dollars, although \$27,772,075 had been coined in the mean while. Of the \$128,329,880 coined since the passage of the act of February 28, 1878, only \$35,383,786 were in circulation. There were silver certificates outstanding for \$65,620,450, leaving \$26,794,527 belonging to the Treasury. The amount of silver certificates in circulation had decreased during the year to about the same amount that the circulation of silver dollars had increased. The new gold certificates are expected by the Secretary of the Treasury to expel the silver certificates. The state of India exchanges had caused an accumulation of India Council bills, leaving three fifths of the £15,000,000 annually drawn by the English Government to be disposed of between the 1st of January and the 31st of March, 1883. The price of silver declined from 52½d. per ounce, to 50d., so that the bullion value of the silver dollar stood at only 84 cents at the close of the year.

The Kiernan interest law, abolishing the penalties for usury as far as call loans are concerned in New York, had the desired effect of putting an end to the fractional commissions charged in stock transactions in times of active speculation and a tight money market. These daily commissions raised the rate of interest in sudden leaps to 11, 16, 28, 51, and sometimes 96 per cent per annum, and therefore greatly favored manipulators of the money market. Only on one occasion since the passage of the bill in May was there an attempt made to revive the commission system. It was in the last week of September, and was the result of the locking up of loanable funds by speculators for a fall in stocks. The stringency was re-

lieved by the redemption of bonds at the order of the Secretary of the Treasury. One effect of the new interest law was to attract loanable capital to some extent from Canada when scarce in New York. Toward the end of the calendar year there was a tendency to higher rates for money. At the close of November, prime commercial paper was discounted at the rates of 7 or 8 per cent, with an easier market in December, and rates ranging from 5½ to 6½ per cent.

The average rate of interest in New York for each year since 1874 has been as follows:

YEAR.	Call loans.	Commercial paper.
1874.....	8.8 per cent.	6.4 per cent.
1875.....	8.0 "	5.8 "
1876.....	8.3 "	5.2 "
1877.....	8.0 "	5.2 "
1878.....	4.4 "	5.1 "
1879.....	4.4 "	4.4 "
1880.....	4.0 "	5.3 "
1881.....	3.8 "	5.0 "
1882.....	4.4 "	5.4 "

The exchanges in New York aggregated about \$47,000,000,000 during 1882, against \$49,376,882,883 in 1881. They were less swelled by stock speculations. The estimated portion belonging to legitimate trade is estimated in the "Public" at \$31,500,000,000, against \$31,483,517,189 in 1881. The aggregate exchanges of twenty-five cities besides New York amounted to about \$14,600,000,000 in 1882, against \$14,900,000,000 in 1881. The exchanges of the minor cities and those of New York also were more affected than ever before by speculation in produce.

THE STOCK MARKET.—A remarkable change was noticed in the sentiments of the public toward railroad enterprises in 1882, contrasting curiously with the buoyant and adventurous eagerness with which business-men speculated on the prospects of railroad lines a year or two before. The diminished traffic of 1881 and the trunk-line war naturally depressed values. There was a partial recovery at the close of the rate war from the very low market of February, but in March the market threatened to break down. The two leading operators sought to inspire confidence, the one by displaying his own enormous holdings of securities, the other by hopeful predictions. It afterward transpired that they had parted with some of their property at the better prices which their own assurances had obtained. It was suspected that the railroad war and the one which followed on the Northwestern roads were contrived by directors who had sold their shares and wished to regain them cheaply. It was suspected after a sudden fall of prices in April that the market had been artificially sustained and then depressed with a preconceived purpose. The reports of railroad officers were more enigmatic than ever before, and the affairs of the corporations elaborately confused. The new railroads constructed within three years at a cost of some \$700,000,000, and represented

by twice that amount of new securities, were most of them competitive lines of doubtful prospects themselves and calculated to injure the prospects of existing lines. The intrinsic worth and promise of the railroads were nevertheless as strong in the latter part of 1882 as at any time in the past. But the frequent recent experiences of the misdirection of corporate business and concealment of corporate affairs for stock-jobbing purposes had destroyed public confidence in share property. There was a purchasing movement when the crop prospects became known in July and August, but the market drooped during the remainder of the year. The prices of many stocks sank to the lowest figures known for years. Speculative operations were pretty much confined to the few gigantic operators, and the *habitues* of Wall Street, who base their ventures on conjectures as to the intentions of the "railroad kings." There was no speculation for a rise among these, for the notion prevailed that Gould was opposed to higher range of prices. Some of the speculative stocks, such as Denver and Rio Grande, Richmond and Danville, Louisville and Nashville, and Hannibal and St. Joseph, passed rapidly through a long decline. Persons of speculative proclivities who had learned to shun the Stock Exchange resorted to the more harmful speculations in produce, which reached a stage in 1882 in which the Legislatures and even the Produce Exchanges debated about the means of suppressing speculations in future contracts on margins. Government securities were higher than ever before in 1882, and the more stable classes of railroad bonds rose somewhat in price. This was not owing to a decline in the average rate of interest, but to the accumulation of capital held in trust which is limited to such investments, and partly to foreign competition for the stronger class of investments.

Railroad business suffered more than any other from the national disasters of 1881. The storms of the winter of 1880-'81 added greatly to their running expenses. When the failure of crops and the operations of grain speculators reduced the traffic far below their collective carrying capacities, the trunk-lines engaged in a war of rates in competition for the diminished traffic in order to force from one another more favorable terms in a future pooling arrangement. The contest lasted eight months, and its effects were felt for twelve. The stock market more than discounted these adverse influences. Railroad enterprise was suddenly paralyzed. Up to the middle of 1881 railroad shares and securities had risen greatly in market value since the revival of business. From that period to the close of 1882 the values wavered or declined. This was owing to the timidity of foreign investors, and the fact that the probable returns from railroad investments were at the scale of prices already reached for the more approved securities below the normal rate of American profits, while the extension of indus-

try in many directions was constantly opening more promising fields for home capital.

Railroad construction in 1882, while falling short of the enormous mileage projected for the season's work, exceeded considerably that of 1881, and was largely in excess of the construction of any previous year. The mileage of new track laid in 1882 was over 10,000 miles. While the lines for which capital had been paid in, contracts made, and materials provided were being finished, the buoyant feelings which prompted the formation of many new schemes in the previous year fell to a low ebb, and several of those projects were abandoned or postponed. The railroad mileage of the United States doubled between 1870 and 1881, increasing from 52,914 to 104,813 miles. If all the portions of the country which are equal to Ohio in natural resources were as well provided with railroads as that State is at present, 150,000 miles additional would have to be constructed; and if the present mileage of Ohio, which has one mile of railroad to six square miles of territory, represents the average mileage of the United States when the network is completed, the country will have at least 500,000 miles of railroad lines. Complete data have been collected for 1881. The length of line constructed was 9,358 miles, the heaviest construction in any former year having been 7,379 miles in 1871. The cost of the new roads built in 1871, estimating it at \$25,000 per mile, aggregated \$233,750,000. Including the expenditure upon improvements on existing roads and upon the completion of new lines already laid, the capital outlay for the year was as much as \$400,000,000. The number of persons employed in operating the railroads is estimated at twelve per mile, or over 1,200,000, in addition to whom about 4,000 were employed in construction. The tonnage transported in 1881 is estimated in Poor's "Manual" at 3,500 tons per mile, which, valued at \$50 per ton, with one third deducted for duplication, would amount to \$12,000,000,000, or more than \$200 per head of the population. One of the great trunk-lines has a greater tonnage than all the railroads of the country in 1851, when it did not exceed \$10 per head of the population.

The trunk-line war of the autumn and winter of 1881-'82 was commenced by Vanderbilt, who considered that the pooling arrangement existing between the through railroads discriminated against the Central Railroad and the commercial interests of New York. The rates previously agreed upon were two cents less per hundred pounds from Chicago to Philadelphia, and three cents less to Baltimore than to New York. The managers of the two trunk-lines terminating in New York demanded a new arrangement by which the freight should be made the same on all the routes. After eight months of unprofitable underbidding, the managers of the railroads referred the dispute to an advisory commission consisting of ex-Senator Thurman, ex-Minister Washburne, and Judge Cooley, of



Michigan. The arbitrators, after listening to the different representations regarding relative distance, net cost of transportation, port and elevator charges, etc., decided that the former pool was as good a working arrangement as they could suggest; the war, therefore, ended where it began.

The New York, Chicago, and St. Louis, nicknamed the "Nickel-Plate" line, one of the new companies formed in 1881, with a capital stock of \$50,000,000 and a bonded debt of \$15,000,000, after completing the 521 miles of line from Buffalo to Chicago, changed ownership in October, passing into the control of the Vanderbilt interest. The original subscribers had invested some \$20,000,000 in the road, for which they held \$15,000,000 of bonds in addition to the stock, with \$4,000,000 additional outlay, for which short equipment bonds were issued. The syndicate to obtain a controlling interest in the property, subject to these two liens, so as to stop the competition of the new road, paid \$7,290,000 for a majority of the stock.

In November the railroad corporations of the Northwest, notwithstanding the pressure of traffic which was equal to all their facilities, entered into a desperate war of rates. The quarrel was about disputed territory, though a stock-jobbing intrigue was also alleged. The cutting of rates continued one month, when the war ended in the absorption of the St. Paul and Omaha by the Chicago and Northwestern road, making it subsidiary to the Vanderbilt combination. The Hannibal and St. Joseph Railroad passed in September into the control of Messrs. Gould, Sage, and Dillon, who purpose making Chicago, instead of Omaha, the eastern terminus of the Union Pacific. The stock was purchased of the speculators, who by a "corner" forced the price up to 350 in September, 1881. The Union Pacific syndicate took from them nearly the whole of the common stock of the road at a price which entailed heavy losses upon the manipulators of the corner.

The Western Union Telegraph Company, upon its amalgamation with the Atlantic and Pacific and the American Union Companies in the early part of 1881, issued \$15,000,000 of new shares in exchange for the stock and bonds of the American Union, \$8,400,000 to the holders of Atlantic and Pacific shares, and distributed something over \$15,500,000 as a stock dividend among its own shareholders, issuing altogether \$80,000,000 of new stock. Prior to the consolidation the outstanding capital stock of the Western Union Company was somewhat less than \$39,000,000. Some of the stockholders contested the emission of the shares which were given as a bonus to the Western Union shareholders. The points raised in equity were decided in favor of the company; but on review of the question the General Term in November, 1882, declared the stock dividend illegal. Jay Gould and his associates, who control the Western Union, obtained a majority of the

stock of a new opposition line, the Mutual Union, in March; but the managers succeeded in escaping control. A suit was brought in the name of Jay Gould to annul the charter of the Mutual Union, on the ground of the unauthorized increase of its capital stock. The contention was not upheld by the court. The Western Union company leased the American Cable, guaranteeing 6 per cent upon its \$10,000,000 of stock raised to \$14,000,000. By a combination with the Anglo-American Cable Company it controls the telegraphic intercourse with Europe. One of the projects started in 1882 was a new transatlantic cable line, of which James Gordon Bennett, of the "New York Herald," is the chief promoter. The mileage of the Western Union Telegraph, as reported June 30th, is 131,060 miles of line and 374,368 miles of wire.

The gross earnings of the railroads in operation in 1881 amounted to \$725,325,119, about \$110,000,000 more than the preceding year; and the net earnings to \$276,654,119, some \$21,500,000 more. The operating expenses were about 62 per cent of the gross receipts. During the year \$128,887,002 were paid in interest on the funded debts and \$93,344,200 in dividends on the stock, against \$77,115,411 in 1880. In the ten years from 1872 to 1881 the mileage of American railroads in operation increased from 57,323 to 94,486 miles; their aggregate capital and funded debt from \$3,159,423,057 to \$5,010,389,579; their gross earnings from \$465,241,055 to \$725,325,119; their net earnings from \$165,754,373 to \$276,654,119; the freight receipts from \$340,931,785 to \$551,968,477; the passenger receipts from \$132,309,270 to \$173,356,642; the dividends paid from \$64,418,157 to \$93,344,200.

The dividends declared in 1882 showed that the railroads had not suffered as much as was anticipated. The New York Central lost most by the freight-war, and was obliged to anticipate future profits and pay its regular 8 per cent dividend with borrowed money. During the closing months of the crop year 1881-'82 the traffic on this line fell off largely, owing to the grain operations in Chicago known as the Keene corner. The average rate obtained per ton per mile for all kinds of freight was reported for the year ending September 30th, as 73 hundredths of a cent, which is exactly one half the price obtained for carriage in 1873-'74. The Erie and the Baltimore and Ohio roads were helped by the improved coal-traffic, and paid, the first 6 per cent, with another 6 per cent announced for 1883, the first dividends declared by this company since its reorganization; and the other the 10 per cent dividend to which it had returned the year before. The Pennsylvania Railroad also paid a dividend of 8 per cent, 2 per cent of it in stock, but represented by recent financial operations. The railroads of the growing Northwest reported an exceedingly profitable business. Roads which were formerly bankrupt paid in 1881

and 1882 dividends of 7 per cent, and others paid as much on stock which had been largely increased, in the case of the Rock Island Railroad actually doubled. The coal roads, except those which are in liquidation, have resumed the payment of dividends. The railroads of the South show the least profitable business, though in some of their reports marked signs of progress are seen.

**CONGREGATIONALISTS.** The following is a summary of the statistics of the Congregational churches in the United States, as they are given in the "Congregational Year-Book" for 1882:

STATES AND TERRITORIES.	Churches.	Ministers.	Church-members.
Alabama	15	16	920
Arizona	1	1	22
Arkansas	2	3	81
California	86	78	5,186
Colorado	27	29	1,081
Connecticut	297	376	55,202
Dakota	50	36	1,006
District of Columbia	4	16	892
Florida	2	2	78
Georgia	12	11	913
Illinois	246	299	22,842
Indiana	31	22	1,612
Indian Territory	4	2	80
Iowa	286	196	15,865
Kansas	197	140	5,885
Kentucky	1	3	86
Louisiana	19	17	1,543
Maine	238	205	22,081
Maryland	2	1	222
Massachusetts	528	611	39,962
Michigan	240	290	17,127
Minnesota	145	116	7,085
Mississippi	5	2	151
Missouri	72	62	3,953
Nebraska	185	85	3,682
Nevada	1	1	28
New Hampshire	138	194	20,157
New Jersey	25	34	3,254
New Mexico	3	4	31
New York	253	261	35,258
North Carolina	6	6	396
Ohio	214	182	23,209
Oregon	14	16	839
Pennsylvania	27	33	2,086
Rhode Island	27	40	5,422
South Carolina	2	3	182
Tennessee	5	9	417
Texas	9	10	222
Utah	2	3	173
Vermont	197	199	19,951
Virginia	3	4	314
Washington Territory	23	14	384
West Virginia	3	3	126
Wisconsin	194	184	13,315
Wyoming	3	4	152
Total	3,804	3,718	381,697

Of the churches, 2,858 were entered as "with pastors," and 946 as "vacant." Of the ministers, 2,450 were "in pastoral work," and 1,263 were "not in pastoral work." The foreign missionaries are not included in the enumeration of ministers. Whole number of baptisms during the year, 5,560 of adults, and 4,309 of infants; number of additions by profession of faith, 11,311; number of families in the churches, 195,748; number of persons in Sunday-schools, 447,413. Total amount of benevolent contributions, \$1,227,108; amount of contributions for home expenditures, \$2,810,333.

The seven theological seminaries—Andover, Mass.; Bangor, Me.; Chicago, Ill.; Hartford, Conn.; Oberlin, Ohio; Oakland, Cal. (Pacific), and New Haven, Conn. (Yale)—returned for 1881, 32 professors, 27 lecturers, 13 resident licentiates, 21 members of graduating classes, and a total of 275 students.

**AMERICAN CONGREGATIONAL BENEVOLENT SOCIETIES.**—The annual meeting of the *American Congregational Union* was held in New York city, May 11th. The receipts of the society for the year had been \$51,322, or \$7,599 more than those of the previous year. Pledges of aid had been made to 103 churches and grants to 72 churches, the whole amounting to \$45,135. It was stated that three fourths of the Congregational churches in the United States had made no contribution to the Union.

The second anniversary of the *New West Educational Commission* was held in Chicago, Ill., in May. The income of the society for the year had been \$84,716, and it had a balance in the treasury of \$311. The schools under its care were represented as being well attended, especially those in Utah; and the academies at Salt Lake City, Utah; Albuquerque and Las Vegas, N. M.; and Trinidad, Col., had been prosperous. Of the eleven common schools, all of which were in Utah, six had been started during the year. They were attended by Mormons, "apostates," and "Gentiles."

The annual meeting of the *American Home Missionary Society* was held in the city of New York, May 10th. The receipts of the society for the year had been \$340,778, a sum in excess of the receipts of any previous year. A balance in the treasury of \$27,935 was reported. One thousand and seventy missionaries and superintendents had been employed, 38 more than in the previous year. Reports suggesting modifications in the constitution and administration of the society were presented by committees which had been appointed at a previous meeting, and by the Triennial Council of Congregational Churches in the United States, and were received with considerable differences of opinion. They were referred to a new committee of nine persons, which was directed to consider and report upon their provisions so far as they relate to constitutional changes; to report at the next annual meeting of the society any amendments to the constitution which it may think fit to recommend; and to publish its report in the denominational papers before September, 1882.

The annual meeting of the *American Missionary Association* was held in Cleveland, Ohio, October 24th, 25th, and 26th. The Hon. William B. Washburn, of Massachusetts, presided. The total receipts of the Association for the year had been \$298,103, and the expenditures had been \$297,313. Of the expenditures \$230,733 had been applied to the work in the South, \$12,454 to that among the Chinese, \$2,020 to that among the Indians, and \$16,801 to the foreign mission. Fifty-seven schools



were conducted in the Southern States, including eight chartered institutions, eleven high and normal schools, and 38 common schools, in which 241 teachers were employed. The whole number of students was 9,608, or 500 more than were returned in the previous year. Of the students, 72 were in the theological, 28 in the law, 104 in the collegiate, 139 in the preparatory, 2,542 in the normal, 1,103 in the grammar, 2,185 in the intermediate, and 3,481 in the primary departments. Several good and commodious new buildings had been erected in connection with the schools. The classes were open to white and colored persons, and to pupils of both sexes. The attendance of white pupils was increasing, as the prejudice against association with colored students yielded to the appreciation of the advantages of the instruction given by the schools. Eighty churches, having 5,641 members, were sustained in the Southern States; nine hundred members had been added to these churches by profession during the year; and they had raised \$9,306 for church purposes, and contributed \$1,496 to benevolent objects. Six new churches had been organized during the year. In connection with the Mendi mission in West Africa measures had been pressed to introduce a steamer upon the waters of the country for the benefit of the mission and the advantage of the people. An expedition had been sent to the upper Nile, preparatory to locating a new mission with the funds to be applied in connection with the contribution of Mr. John Arthington, of Leeds, England, for that purpose. The agents of the society in this expedition had decided to recommend Khartoom as the base of operation for the proposed mission, but the disturbances from which Egypt had been suffering had prevented any further action being taken in this matter. Missions among the Indians had been carried on at Northfield, Mich.; Cass Lake and Red Lake, Minn.; and Skokomish, Fort Berthold, and Sisseton, in the Territories; and 89 Indians of both sexes had been under instruction at the Hampton Institute, Virginia. Five missions were conducted and fifteen schools were taught among the Chinese at different places in California. The whole number of pupils in the schools was 2,567, 935 more than in the previous year, of whom 156 had ceased from idolatry and 106 had become Christians. New missions were contemplated at San Francisco (an additional one), Los Angeles, where the first mission of the Association was established, and Chicó; the Association was represented on the Pacific coast by its auxiliary, the California Chinese mission. Application had been made to the Association to establish a mission at Hong-Kong, China; but as this society had adopted a policy of not extending its foreign missions, the committee had proposed to the American Board that it undertake that work. The Association was preparing to withdraw entirely from the foreign-mission work, and to that end was ready

to surrender its Mendi mission to the American Board or to the United Brethren (who have a mission in the same region), and the proposed mission on the upper Nile to the American Board or to the United Presbyterian Church in North America as a branch of its mission in Egypt.

The seventy-third annual meeting of the *American Board of Commissioners for Foreign Missions* was held in Portland, Maine, beginning October 3d. The Rev. Mark Hopkins, D. D., LL. D., presided. The total receipts of the board for the year had been \$651,976. The general permanent fund amounted to \$162,947, and the permanent fund for officers to \$59,108. During four years, \$778,928 of the legacy which had been left to the board by Asa Otis had been expended on new missions and for educational and evangelistic purposes, \$189,705 (included in the statement of receipts) having been drawn from it during the past year. The following general summary of the work of the board was presented:

Missions.....	20
Stations.....	84
Out-stations.....	708
Ordained missionaries (five physicians).....	164
Physicians not ordained.....	10
Other male assistants.....	10
Other female assistants.....	272
Whole number of laborers sent from this country.....	456
Native pastors.....	148
Native preachers and catechists.....	488
Native school-teachers.....	1,055
Other native helpers.....	271—1,912
Whole number of laborers connected with the missions.....	2,868
Pages printed, as far as reported.....	81,000,000
Churches.....	291
Church-members.....	19,755
Added during the year.....	1,701
High-schools, theological seminaries, and station-classes.....	63
Pupils.....	2,210
Boarding-schools for girls.....	41
Pupils.....	1,688
Common schools.....	806
Pupils.....	81,953
Whole number of pupils.....	86,865

As compared with those of the previous year, the reports showed a net increase of 26 missionaries, 23 churches, 80 native pastors and preachers, 17 high-schools and seminaries, with 1,000 students, and 1,500 pupils in common schools. Progress was reported of the efforts to establish a new mission in Umzila's kingdom, Africa. In the Western Turkey mission (Constantinople and Asia Minor), efforts were in progress to give a larger share of labor and responsibility to Armenians of real worth and ability. Such persons had been urged to assume the charge of the religious newspapers and other publications, and to co-operate with the missionaries as evangelists. At Nicomedia a joint committee of delegates from the churches was uniting heartily with the missionary in all plans and efforts for the furtherance of education and evangelization. The work of the missions in China had been carried westward into Shansi, and a new station had been opened at Tai-yuen-fu, the capital of that province. Arrangements were also in progress to estab-

lish a station at Hong-Kong, for the benefit of Chinese Christians returning from the United States and Australia. The efforts of the native Christians to help themselves were represented by contributions of more than \$80,000 for their own schools, churches, and religious literature. A transfer of the Dakota mission to the American Missionary Association was recommended by the committee having the subject of that work in charge.

**DOCTRINAL QUALIFICATIONS FOR THEOLOGICAL PROFESSORSHIPS.**—A discussion respecting the doctrinal qualifications required for a professorship in the Theological Seminary at Andover has attracted much attention. The Rev. Newman Smyth, D. D., of Quincy, Ill., was in March designated by the Faculty and Board of Trustees of the Andover Seminary as Professor of Christian Theology. The election, to be valid, required the assent also of the Board of Visitors. Dr. Smyth was the author of works on "The Religious Feeling," "Old Faiths or New Light," and "The Orthodox Theology of To-day," in which, while the Orthodox doctrines on that subject were not directly contradicted, expressions were used which seemed to leave his position in reference to the dogma of a future eternal punishment of the wicked in doubt; and to indicate that he held the attitude of an "agnostic" toward it; that he foreshadowed a period of probation in the future life; that he neither affirmed nor denied the eternal punishment of those who did not avail themselves of a second chance and repent; and that he did not wholly reject the propriety of praying for the dead. Expressions which might be construed as supporting such views, it was held, disqualified him for the position to which he had been partly invited, for among the conditions of the foundation of the professorship in question was that the person filling the chair must subscribe to the belief that, "being morally incapable of recovering the image of his Creator, which was lost in Adam, every man is justly exposed to eternal damnation; . . . that the wicked will awake to shame and everlasting contempt." It was urged, on the other hand, that Dr. Smyth was a minister in good standing in the Presbyterian Church, and that the conditions of the foundation of the professors' chairs in the seminary had usually been given a liberality of construction with which the expressions objected to were not in conflict. The Board of Visitors refused to concur in the appointment of Dr. Smyth. They based their rejection, however, not on the character of his theological views, which, after hearing his statement of them, they said were "in general harmony with those which have been identified with the history of the Andover Seminary from the beginning," but upon the want of precision and definiteness of statement and of thoroughness of thought in his writings, which indicate "a way of looking at theological questions not hopeful for the success of a theological teacher."

**BRITISH CONGREGATIONALISTS.**—The English "Congregational Year-Book" for 1882 gives lists of 4,397 churches and 899 mission-stations in Great Britain and Ireland, and 589 churches in the colonies, not including the churches sustained by the London Missionary Society in heathen lands.

The receipts of the *London Missionary Society*, for the year ending with the anniversary of 1882, were £116,012. The society employed 156 missionaries, of whom 14 were women, in its missions in South and Central Africa, Madagascar, India, China, the South-Sea Islands, New Guinea, and the West Indies. The missionary force in Central Africa (at Lake Tanganyika) had been enlarged, and the forces in India and China were to be enlarged. Missions had been planted at two points in New Guinea, and a substantial beginning had been made at Port Moresby.

The annual meeting of the *Congregational Union of England and Wales* was held May 1st, under the presidency of the Rev. Dr. Macfadyen. The Rev. Dr. Fairbairn was chosen president for the ensuing year. The income of the Union for the year had been £10,410, and it had a balance from the publication account of £1,436. The report of the transactions of the year, presented by the Jubilee Committee, stated that instead of the usual Congregational lecture there had been substituted a series of special Jubilee lectures (in view of the movement for the collection of a Jubilee fund), the purpose of which was to promote a knowledge of Congregational principles and history. Conferences on the amendment of the laws relating to marriages in non-conformist places of worship had been held, and had resulted in action of the Autumnal Assembly of the previous year demanding certain amendments of the law; a special committee had been appointed to deal with the subject of middle-class education, and was at work investigating it. A scheme had been prepared, in accordance with a memorial from members of the Universities of Oxford and Cambridge, for the delivery of an experimental course of six lectures in each of those towns, in which the Baptist Union was expected to co-operate. Two boards of education—one for the northern and one for the southern colleges—had been appointed to consider respecting modifications of the college system. A special committee had been appointed in response to communications received from the native churches of Jamaica, to give to them, for a limited period, the aid which they had heretofore received from the London Missionary Society; but which could not be continued to them in that shape, because those churches could not any longer be regarded as heathen. A special report was made concerning the "Jubilee fund" of £250,000 which the Union had undertaken to raise for purposes commemorative of the completion of the fiftieth year of its organized existence. The fund now amounted, in money and promises, to £152,000.



CONGRESS, UNITED STATES. The first session of the Forty-seventh Congress commenced on December 5, 1881. (For the President's message, see "Annual Cyclopædia," 1881, "Public Documents.") In the Senate, David Davis, Senator from Illinois, took the chair. In the House of Representatives, Joseph Warren Keifer, a representative from Ohio, was chosen Speaker.

The following is a list of members:

## SENATE.

<i>Alabama.</i>	<i>Arkansas.</i>
1883, John T. Morgan, D.	1883, A. H. Garland, D.
1885, James L. Fugh, D.	1885, James D. Walker, D.
<i>California.</i>	<i>Colorado.</i>
1887, John F. Miller, R.	1883, George M. Chilcott, R.
1885, James T. Farley, D.	1885, N. P. Hill, R.
<i>Connecticut.</i>	<i>Delaware.</i>
1887, Joseph R. Hawley, R.	1887, Thomas F. Bayard, D.
1885, Orville H. Platt, R.	1883, Eli Saulsbury, D.
<i>Florida.</i>	<i>Georgia.</i>
1887, C. W. Jones, D.	1883, Benjamin H. Hill, D.
1885, Wilkinson Call, D.	1885, Joseph E. Brown, D.
<i>Illinois.</i>	<i>Indiana.</i>
1883, David Davis, I.	1887, Benjamin Harrison, R.
1885, John A. Logan, R.	1885, D. W. Voorhees, D.
<i>Iowa.</i>	<i>Kansas.</i>
1883, J. W. McDill, R.	1883, P. B. Plumb, R.
1885, William B. Allison, R.	1885, John J. Ingalls, R.
<i>Kentucky.</i>	<i>Louisiana.</i>
1883, James B. Beck, D.	1883, W. P. Kellogg, R.
1885, J. S. Williams, D.	1885, Benjamin F. Jonas, D.
<i>Maine.</i>	<i>Maryland.</i>
1887, Eugene Hale, R.	1887, A. P. Gorman, D.
1883, William P. Frye, R.	1885, James B. Groom, D.
<i>Massachusetts.</i>	<i>Michigan.</i>
1887, H. L. Dawes, R.	1887, O. D. Conger, R.
1883, George F. Hoar, R.	1883, Thomas W. Ferry, R.
<i>Minnesota.</i>	<i>Mississippi.</i>
1887, S. J. R. McMillan, R.	1887, J. Z. George, D.
1883, William Windom, R.	1883, L. Q. C. Lamar, D.
<i>Missouri.</i>	<i>Nebraska.</i>
1887, F. M. Cockrell, D.	1887, Chas. H. Van Wyck, R.
1885, George G. Vest, D.	1883, Alvin Saunders, R.
<i>Nevada.</i>	<i>New Hampshire.</i>
1887, J. G. Fair, D.	1883, Edward H. Rollins, R.
1883, John P. Jones, R.	1885, Henry W. Blair, R.
<i>New Jersey.</i>	<i>New York.</i>
1887, William J. Sewell, R.	1887, Warner Miller, R.
1883, J. R. McPherson, D.	1885, Elbridge G. Lapham, R.
<i>North Carolina.</i>	<i>Ohio.</i>
1883, M. W. Ransom, D.	1887, John Sherman, R.
1885, Zeb. B. Vance, D.	1885, G. H. Pendleton, D.
<i>Oregon.</i>	<i>Pennsylvania.</i>
1883, Lafayette Grover, D.	1887, John I. Mitchell, R.
1885, James H. Slater, D.	1885, J. Donald Cameron, R.
<i>Rhode Island.</i>	<i>South Carolina.</i>
1887, Nelson W. Aldrich, R.	1883, M. C. Butler, D.
1883, H. B. Anthony, R.	1885, Wade Hampton, D.
<i>Tennessee.</i>	<i>Texas.</i>
1887, Howell E. Jackson, D.	1887, S. B. Maxey, D.
1883, I. G. Harris, D.	1883, Richard Coke, D.
<i>Vermont.</i>	<i>Virginia.</i>
1887, G. F. Edmunds, R.	1887, William Mahone, I.
1883, J. S. Morrill, R.	1883, J. W. Johnston, D.
<i>West Virginia.</i>	<i>Wisconsin.</i>
1887, Johnson N. Camden, D.	1887, Angus Cameron, R.
1883, H. G. Davis, D.	1885, Philatus Sawyer, R.

## Recapitulation.

Republicans.....	37	Independents.....	1
Democrats.....	37	Readjuster.....	1

## HOUSE OF REPRESENTATIVES.

<i>Alabama.</i>	
1, Thomas H. Herndon, D.	5, Thomas Williams, D.
2, Hillary A. Herbert, D.	6, Goldsmith W. Hewitt, D.
3, William C. Oates, D.	7, William H. Forney, D.
4, Charles M. Shelley, D.	8, Joseph Wheeler, D.
<i>Arkansas.</i>	
1, Poindexter Dunn, D.	3, Jordan E. Cravens, D.
2, James K. Jones, D.	4, Thomas M. Gunter, D.
<i>California.</i>	
1, William S. Rosecrans, D.	3, Campbell P. Berry, D.
2, Horace F. Page, R.	4, Romualdo Pacheco, R.
<i>Colorado.</i>	
1, James B. Belford, R.	
<i>Connecticut.</i>	
1, John R. Buck, R.	3, John T. Wait, R.
2, James Phelps, D.	4, Frederick Miles, R.
<i>Delaware.</i>	
1, Edward L. Martin, D.	
<i>Florida.</i>	
1, R. H. M. Davidson, D.	2, Jesse J. Finley, D.
<i>Georgia.</i>	
1, George R. Black, D.	6, James H. Blount, D.
2, Henry G. Turner, D.	7, Judson C. Clements, D.
3, Philip Cook, D.	8, Alexander H. Stephens, D.
4, Hugh Buchanan, D.	9, Emory Speer, D.
5, Nathaniel J. Hammond, D.	
<i>Illinois.</i>	
1, William Aldrich, R.	11, James W. Singleton, D.
2, George R. Davis, R.	12, William M. Springer, D.
3, Charles B. Farwell, R.	13, Dietrich C. Smith, R.
4, John C. Sherwin, R.	14, Joseph G. Cannon, R.
5, Robert M. A. Hawk, R.	15, Samuel W. Moulton, D.
6, Thomas J. Henderson, R.	16, William A. J. Sparks, D.
7, William Cullen, R.	17, William R. Morrison, D.
8, Lewis E. Payson, R.	18, John R. Thomas, R.
9, John H. Lewis, R.	19, R. W. Townshend, D.
10, Benjamin F. Marsh, R.	
<i>Indiana.</i>	
1, William Hellman, R.	8, Robert B. F. Pierce, R.
2, Thomas R. Cobb, D.	9, Godlove S. Orth, R.
3, S. M. Stockslager, D.	10, Mark L. De Motte, R.
4, William S. Holman, D.	11, George W. Steele, R.
5, Courtland C. Matson, D.	12, Walpole G. Colerick, D.
6, Thomas M. Browne, R.	13, William H. Calkins, R.
7, Stanton J. Peele, R.	
<i>Iowa.</i>	
1, Moses A. McCold, R.	6, Madison E. Cutts, R.
2, Sewell S. Farwell, R.	7, John A. Kasson, R.
3, Thomas Updegraff, R.	8, William P. Hepburn, R.
4, Nathaniel C. Deering, R.	9, Cyrus C. Carpenter, R.
5, William G. Thompson, R.	
<i>Kansas.</i>	
1, John A. Anderson, R.	3, Thomas Ryan, R.
2, Dudley C. Haskell, R.	
<i>Kentucky.</i>	
1, Oscar Turner, D.	6, John G. Carlisle, D.
2, James A. McKenzie, D.	7, J. C. S. Blackburn, D.
3, John W. Caldwell, D.	8, P. B. Thompson, Jr., D.
4, J. Proctor Knott, D.	9, John D. White, R.
5, Albert S. Willis, D.	10, Elijah C. Plister, D.
<i>Louisiana.</i>	
1, Randall L. Gibson, D.	4, Newton C. Blanchard, D.
2, E. John Ellis, D.	5, J. Floyd King, D.
3, Chester B. Darrall, R.	6, Edward W. Robertson, D.
<i>Maine.</i>	
1, Thomas B. Reed, R.	4, George W. Ladd, D.
2, Nelson Dingley, Jr., R.*	5, Thompson H. March, Gr.
3, Stephen D. Lindsey, R.	

\* In place of William P. Frye, elected U. S. Senator.

*Maryland.*

- 1, George W. Covington, D.
- 2, J. F. C. Talbot, D.
- 3, Felter S. Hoblitzell, D.
- 4, Robert M. McLane, D.
- 5, Andrew G. Chapman, D.
- 6, Milton G. Urner, E.

*Massachusetts.*

- 1, William W. Crapo, R.
- 2, Benjamin W. Harris, R.
- 3, Ambrose A. Ranney, R.
- 4, Leopold Morse, D.
- 5, Selwyn Z. Bowman, R.
- 6, Eben F. Stone, E.
- 7, William A. Russell, R.
- 8, John W. Candler, R.
- 9, William W. Rice, E.
- 10, Amasa Norcross, E.
- 11, George D. Robinson, R.

*Michigan.*

- 1, Henry W. Lord, R.
- 2, Edwin Willits, E.
- 3, Edward S. Lacey, R.
- 4, Julius C. Burrows, R.
- 5, George W. Webber, R.
- 6, Oliver L. Spaulding, R.
- 7, John T. Rich, E.\*
- 8, Roswell G. Horr, R.
- 9, Jay A. Hubbell, E.

*Minnesota.*

- 1, M. H. Dunnell, E.
- 2, Horace B. Strait, E.
- 3, W. D. Washburn, R.

*Mississippi.*

- 1, H. L. Muldrow, D.
- 2, Van H. Manning, D.
- 3, H. D. Money, D.
- 4, Otho R. Singleton, D.
- 5, Charles E. Hooker, D.
- 6, J. K. Chalmers, D.

*Missouri.*

- 1, Martin L. Clardy, D.
- 2, Thomas Allen, D.
- 3, R. Graham Frost, D.
- 4, Lowndes H. Davis, D.
- 5, Richard P. Bland, D.
- 6, Ira S. Hazeltine, N.
- 7, Theron S. Rice, N.
- 8, Robert T. Van Horn, R.
- 9, Nicholas Ford, N.
- 10, Joseph H. Burrows, N.
- 11, John B. Clark, Jr., D.
- 12, William H. Hatch, D.
- 13, Aylett H. Buckner, D.

*Nebraska.*

- 1, Ed. K. Valentine, E.

*Nevada.*

- 1, George W. Cassidy, D.

*New Hampshire.*

- 1, Joshua G. Hall, E.
- 2, James F. Briggs, E.
- 3, Ossian Ray, R.

*New Jersey.*

- 1, George M. Robeson, R.
- 2, John Hart Brewer, E.
- 3, Miles Ross, D.
- 4, Henry S. Harris, D.
- 5, John Hill, R.
- 6, Phineas Jones, R.
- 7, Ang. A. Hardenbergh, D.

*New York.*

- 1, Perry Belmont, D.
- 2, William E. Robinson, D.
- 3, J. Hyatt Smith, R.
- 4, Archibald M. Bliss, D.
- 5, Benjamin Wood, D.
- 6, Samuel S. Cox, D.
- 7, Philip H. Dugro, R.
- 8, Anson G. McCook, R.
- 9, John Hardy, D.†
- 10, Abram S. Hewitt, D.
- 11, Roswell P. Flower, D.‡
- 12, Waldo Hutchins, D.
- 13, John H. Ketcham, R.
- 14, Lewis Beach, D.
- 15, Thomas Cornell, R.
- 16, Michael N. Nolan, D.
- 17, Walter A. Wood, E.
- 18, John Hammond, R.
- 19, Abraham X. Parker, R.
- 20, George West, R.
- 21, Ferris Jacobs, Jr., R.
- 22, Charles R. Skinner, R. §
- 23, Cyrus D. Prescott, E.
- 24, Joseph Mason, R.
- 25, Frank Hiscock, R.
- 26, John H. Camp, R.
- 27, James W. Wadsworth, R. §
- 28, Jeremiah W. Dwight, R.
- 29, David P. Richardson, E.
- 30, John Van Voorhis, R.
- 31, Richard Crolley, R.
- 32, Jonathan Scoville, D.
- 33, Henry Van Aernam, R.

*North Carolina.*

- 1, Louis C. Latham, D.
- 2, Orlando Hubbs, E.
- 3, John W. Shackelford, D.
- 4, William E. Cox, D.
- 5, Alfred M. Scales, D.
- 6, Clement Dowd, D.
- 7, Robert F. Armfield, D.
- 8, Robert B. Vance, D.

*Ohio.*

- 1, Benjamin Butterworth, R.
- 2, Thomas L. Young, R.
- 3, Henry L. Morey, E.
- 4, Emanuel Schultz, E.
- 5, Benjamin Le Ferre, D.
- 6, James M. Ritchie, R.
- 7, John P. Leedom, D.
- 8, J. Warren Keifer, R.
- 9, James S. Robinson, E.
- 10, John B. Rice, R.
- 11, Henry S. Neal, R.
- 12, George L. Converse, D.
- 13, Gibson Atherton, D.
- 14, George W. Geddes, D.
- 15, Rufus R. Dawes, R.
- 16, Jonathan T. Updegraff, R.
- 17, Wm. McKinley, Jr., E.
- 18, Addison S. McClure, E.
- 19, Ezra B. Taylor, R.
- 20, Amos Townsend, R.

\* In place of Omar D. Conger, elected U. S. Senator.  
 † In place of Fernando Wood, died February 13, 1881.  
 ‡ In place of Levi P. Morton, appointed Minister to France.  
 § In the places of Warner Miller and Elbridge G. Lapham, resigned August 1, 1881, having been elected U. S. Senators.

*Oregon.*

- 1, Melvin Clark George, R.

*Pennsylvania.*

- 1, H. H. Bingham, R.
- 2, Charles O'Neill, R.
- 3, Samuel J. Randall, D.
- 4, William D. Kelley, R.
- 5, Alfred C. Harner, E.
- 6, William Ward, R.
- 7, William Godshalk, E.
- 8, Daniel Ermentrout, D.
- 9, A. Herr Smith, R.
- 10, William Mutchler, D.
- 11, Robert Klotz, D.
- 12, Joseph A. Scranton, R.
- 13, Charles N. Brumm, N.
- 14, Samuel F. Barr, E.
- 15, Cornelius C. Jadwin, R.
- 16, Robert J. C. Walker, R.
- 17, Jacob M. Campbell, R.
- 18, Horatio G. Fisher, R.
- 19, F. E. Beltzhoover, D.
- 20, Andrew G. Curtin, D.
- 21, Morgan R. Wise, D.
- 22, Russell Errett, E.
- 23, Thomas M. Bayne, R.
- 24, W. S. Shallenberger, R.
- 25, James Mosgrove, Gr.
- 26, Samuel H. Miller, E.
- 27, Lewis F. Watson, R.

*Rhode Island.*

- 1, Henry J. Spooner, R.\*
- 2, Jonathan Chace, R.

*South Carolina.*

- 1, J. S. Richardson, D.
- 2, Samuel Dibble, D.†
- 3, D. Wyatt Aiken, D.
- 4, John H. Evins, D.
- 5, G. D. Tillman, D.

*Tennessee.*

- 1, Augustus H. Pettibone, R.
- 2, Leonidas C. Houk, R.
- 3, George C. Dibrell, D.
- 4, Benton McMillin, D.
- 5, Richard Warner, D.
- 6, John F. House, D.
- 7, W. C. Whitthorne, D.
- 8, John D. C. Atkins, D.
- 9, C. B. Simonton, D.
- 10, William R. Moore, R.

*Texas.*

- 1, John H. Reagan, D.
- 2, David B. Culberson, D.
- 3, Olin Wellborn, D.
- 4, Roger Q. Mills, D.
- 5, George W. Jones, N.
- 6, Columbus Upson, D.

*Vermont.*

- 1, Charles H. Joyce, R.
- 2, James M. Tyler, E.
- 3, William W. Grout, R.

*Virginia.*

- 1, George T. Garrison, D.
- 2, John F. Dezenendorf, R.
- 3, George D. Wise, D.
- 4, Joseph Jorgenson, R.
- 5, George C. Cabell, D.
- 6, J. R. Tucker, D.
- 7, John Paul, Re.
- 8, John S. Barbour, D.
- 9, Abram Fulkerson, Re.

*West Virginia.*

- 1, Benjamin Wilson, D.
- 2, John Blair Hoge, D.
- 3, John E. Kenna, D.

*Wisconsin.*

- 1, Charles G. Williams, R.
- 2, Lucien B. Caswell, E.
- 3, George C. Hazelton, R.
- 4, P. V. Deuster, D.
- 5, Edward S. Bragg, D.
- 6, Richard Guenther, R.
- 7, Herman L. Humphrey, R.
- 8, Thaddeus C. Pound, R.

*Recapitulation.*

Democrats.....	150	Nationals.....	11
Republicans.....	132	Democratic maj. over all.	7

*Territorial Delegates.*

Arizona—Granville H. Oury. *New Mexico*—T. Luna.  
*Dakota*—R. F. Pettigrew. *Utah*—(Contest.)  
*Idaho*—George Ainslie. *Washington*—T. H. Brents.  
*Montana*—M. Maginnis. *Wyoming*—M. E. Post.

The compensation of the President of the Senate and of the Speaker of the House is \$8,000 a year; of the Senators, Representatives, and Delegates, \$5,000 a year. Mileage is allowed at the rate of twenty cents a mile; and there is an allowance of \$250 for the Congress, for stationery and newspapers.

NEW YORK SENATORIAL ELECTION.—Mr. Hill, of Georgia: "I am instructed by the Committee on Privileges and Elections to report back to the Senate certain memorials from members of the Legislature of New York affecting the right of the present Senators from that State to occupy seats in this chamber, and to ask that the memorials lie on the table and

\* In place of Nelson W. Aldrich, elected U. S. Senator.  
 † Elected June 9, 1881, in place of M. P. O'Connor, died April 26, 1881.



the committee be discharged from their further consideration.

"In deference to the memorialists, and at the special request of some of them, it is proper that I should state briefly and generally the reasons which authorize this conclusion.

"The memorials set forth five reasons as grounds why these gentlemen should not be allowed to sit here. The first alleges that the Legislature did not proceed in separate bodies to vote upon the question until the third Tuesday after notice of the vacancy was communicated by the Governor. The facts are such as to create some controversy as to whether they did proceed on the second Tuesday or the third Tuesday after the notice; but, in any view, the committee are unanimously of the opinion that the Legislature was not deprived of its constitutional right to elect Senators to this body.

"The second allegation is that at one of the joint sessions of the General Assembly a quorum of the State Senators was not present. It is not alleged that there was not a quorum present of each body on the days the respective elections took place; but it is alleged or claimed that under the act of 1866 the failure of either body to be present with a quorum on any day deprives the Legislature of the right to elect. The committee differ with the memorialists in that view. We think that one body of the Legislature could not deprive the Legislature of the right to elect by such absence, if unquestionably on the day of election a quorum of each body of the Legislature was present and voting. We think the reason alleged in this ground is not sufficient to invalidate the election.

"The third ground alleged is that there was not a majority of the whole Legislature actually voting for the members chosen. In our opinion that is not necessary. There was a quorum of each House present in the joint assembly; there was a majority of that quorum actually voting for the members chosen. In our opinion that was a valid election.

"It is alleged specifically in the memorial that the Stockton case is a precedent to the contrary. On examination it will be found that the Stockton case is not a precedent to the contrary. Mr. Stockton, of New Jersey, in the celebrated case so well known, was chosen, not by a majority, but he was chosen by a plurality vote, the Legislature in joint session having declared before the election that a plurality should elect. The Senators now occupying the seats in question, from New York, were not chosen by a plurality vote; they were each chosen by a majority, a quorum of each body being present, and a majority of the joint assembly voting. I will state that, if the cases from New York were like the case from New Jersey, I do not think at this day any gentleman would regard the Stockton case as a precedent. Unquestionably the body that elects has a right to prescribe that a plurality may elect, and I think the report made by Senator

Trumbull on that occasion is not only correct, but conclusive of the law of the case. The committee, therefore, are of the opinion that that ground is not sufficient to invalidate the election.

"The fourth ground relates to Hon. W. Miller, and alleges that he is guilty of certain conduct in violation of section 1,781 and section 1,782 of the Revised Statutes, which disqualify a member from holding any office of honor, trust, or profit under the United States Government. It is sufficient to say that the Senator from New York has never been convicted of a violation of those sections of the Revised Statutes, and a simple inspection of the sections shows that it is conviction that disqualifies, and not allegations by outsiders or third persons who do not prosecute. Therefore the committee overrule that ground, and think it insufficient, conceding the facts alleged to be true for argument; we do not know anything about them.

"The last ground is one of fact. Before I have alluded to what are called legal grounds or allegations that by legal operation the election is void. The last ground alleges that there were rumors of bribery in procuring the election of these gentlemen. The allegation of mere rumors of bribery is not sufficient, unaccompanied with evidence, to require investigation at the hands of the Senate or of its committees. It is alleged in this memorial that one State Senator of New York is under indictment in that State for offering a bribe to a member of the House to vote in the senatorial election. It is due to the Senators holding the seats that the committee should say that that indictment is not for a bribe offered to vote for either one of the present Senators. It is due also to state, that while we find by reports that have been sent to us and investigations had, that there were a great many scandals in connection with the senatorial election in New York during the late session of the Legislature, most of these scandals occurred before the two gentlemen now holding seats became even candidates before that body.

"Therefore, sir, the committee, without going further into details, hold that the respective grounds alleged, and all of them together, are not sufficient to authorize further investigation, and do not make a case invalidating the election of the Senators from New York. We believe, from all that is before us, that the elections were valid and ought to be so declared."

THE GARFIELD MEMORIAL.—In the Senate, on December 5th, Senator John Sherman, of Ohio, offered the following resolution:

*Resolved*, That a committee of six Senators be appointed on the part of the Senate, to join such committee as may be appointed on the part of the House, to consider and report by what token of respect and affection it may be proper for the Congress of the United States to express the deep sensibility of the nation to the event of the decease of the late President, James A. Garfield, and that so much of the message of the President as relates to that melancholy event be referred to said committee.

The resolution was adopted, without debate, on the next day. At the same time, a similar resolution, appointing a committee of one member from each State, was adopted by the House.

The committee appointed on the part of the Senate consisted of Messrs. Sherman, of Ohio; Pendleton, of Ohio; Dawes, of Massachusetts; Lapham, of New York; Bayard, of Delaware; and Morgan, of Alabama, to whom Mr. Conger, of Michigan, and Mr. Brown, of Georgia, were subsequently added.

The committee appointed on the part of the House consisted of the following members: William McKinley, Jr., of Ohio; Romualdo Pacheco, of California; James B. Belford, of Colorado; John T. Wait, of Connecticut; William H. Forney, of Alabama; Poindexter Dunn, of Arkansas; Edward L. Martin, of Delaware; Robert H. M. Davidson, of Florida; Alexander H. Stephens, of Georgia; Joseph G. Cannon, of Illinois; Godlove S. Orth, of Indiana; John A. Kasson, of Iowa; John A. Anderson, of Kansas; John G. Carlisle, of Kentucky; Randall L. Gibson, of Louisiana; Nelson Dingley, Jr., of Maine; Robert M. McLane, of Maryland; Benjamin W. Harris, of Massachusetts; Roswell G. Hoar, of Michigan; Mark H. Dunnell, of Minnesota; Charles E. Hooker, of Mississippi; Nicholas Ford, of Missouri; Edward K. Valentine, of Nebraska; George W. Cassidy, of Nevada; Joshua G. Hall, of New Hampshire; John Hill, of New Jersey; Samuel S. Cox, of New York; Robert B. Vance, of North Carolina; M. C. George, of Oregon; Charles O'Neill, of Pennsylvania; Jonathan Chace, of Rhode Island; D. Wyatt Aiken, of South Carolina; A. H. Pettibone, of Tennessee; Roger Q. Mills, of Texas; Charles H. Joyee, of Vermont; J. Randolph Tucker, of Virginia; Benjamin Wilson, of West Virginia; and Charles G. Williams, of Wisconsin.

On December 21st the committee reported as follows:

*Whereas*, The melancholy event of the violent and tragic death of James Abram Garfield, late President of the United States, having occurred during the recess of Congress, and the two Houses sharing in the general grief, and desiring to manifest their sensibility upon the occasion of the public bereavement: Therefore,

*Be it resolved by the House of Representatives (the Senate concurring)*, That the two Houses of Congress will assemble in the hall of the House of Representatives on a day and hour to be fixed and announced by the joint committee, and that in the presence of the two Houses there assembled, an address upon the life and character of James Abram Garfield, late President of the United States, be pronounced by Hon. James G. Blaine; and that the President of the Senate *pro tempore*, and the Speaker of the House of Representatives, be requested to invite the President and ex-Presidents of the United States, the heads of the several Departments, the judges of the Supreme Court, the representatives of the foreign governments near this Government, the Governors of the several States, the General of the Army and the Admiral of the Navy, and such officers of the Army and Navy as have received the thanks of Congress, who may then be at the seat of government, to be present on the occasion.

*And be it further resolved*, That the President of the United States be requested to transmit a copy of these resolutions to Mrs. Lucretia R. Garfield, and to assure her of the profound sympathy of the two Houses of Congress for her deep personal affliction, and of their sincere condolence for the late national bereavement.

The preamble and resolutions were adopted.

Subsequently a concurrent resolution was adopted to set apart Monday, February 27th, for the memorial services above mentioned.

In the House, on February 27th, the Speaker said: "This day has been dedicated by the action of the two Houses of Congress to services in commemoration of the life and death of James Abram Garfield, late President of the United States. This action was taken through the adoption of concurrent resolutions by the unanimous vote of the two Houses, presented by a select joint committee appointed 'to consider and report by what token of respect, esteem, and affection it may be proper for Congress to express its and the nation's deep sensibility over the event of the decease of our late President.'"

"The House is now assembled and ready to perform its part in the solemn duty."

The following programme of arrangements, prepared by the joint committee of both Houses, was carried out:

#### PROGRAMME OF ARRANGEMENTS.

The Capitol will be closed on the morning of the 27th to all except the members and officers of Congress.

At ten o'clock the east door leading to the Rotunda will be opened to those to whom invitations have been extended under the joint resolution of Congress by the presiding officers of the two Houses, and to those holding tickets of admission to the galleries.

The hall of the House of Representatives will be opened for the admission of Representatives and to those who have invitations, who will be conducted to the seats assigned to them, as follows:

The President and ex-Presidents of the United States, and special guests, will be seated in front of the Speaker.

The Chief-Justice and associate justices of the Supreme Court will occupy seats next to the President and ex-Presidents, and special guests, on the right of the Speaker.

The Cabinet officers, the General of the Army and Admiral of the Navy, and the officers of the Army and Navy who, by name, have received the thanks of Congress, will occupy seats on the left of the Speaker.

The Chief-Justice and judges of the Court of Claims, and the Chief Justice and associate justices of the Supreme Court of the District of Columbia, will occupy seats directly in the rear of the Supreme Court.

The diplomatic corps will occupy the front row of seats.

Ex-Vice-Presidents, Senators, and ex-Senators, will occupy seats in the second, third, fourth, and fifth rows, on east side of main aisle.

Representatives will occupy seats on west side of main aisle, and in rear of the Senators on east side.

Commissioners of the District, Governors of States and Territories, assistant heads of Departments, and invited guests, will occupy seats in rear of Representatives.

The Executive gallery will be reserved exclusively for the families of the Supreme Court, and the families of the Cabinet, and the invited guests of the Pres-



ident. Tickets thereto will be delivered to the Private Secretary of the President.

The diplomatic gallery will be reserved exclusively for the families of the members of the diplomatic corps. Tickets thereto will be delivered to the Secretary of State.

The reporters' gallery will be reserved exclusively for the use of the reporters for the press. Tickets thereto will be delivered to the press committee.

The official reporters of the Senate and of the House will occupy the reporters' desk in front of the Clerk's table.

The House of Representatives will be called to order by the Speaker at twelve o'clock.

The Marine Band will be in attendance.

The Senate will assemble at twelve o'clock, and immediately after prayer will proceed to the hall of the House of Representatives.

The diplomatic corps will meet at half past eleven o'clock in Representatives' lobby, and be conducted by the Sergeant-at-Arms of the House to the seats assigned them.

The President of the Senate will occupy the Speaker's chair.

The Speaker of the House will occupy a seat at the left of the President of the Senate.

The Chaplains of the Senate and of the House will occupy seats next to the presiding officers of their respective Houses.

The chairmen of the joint committee of arrangements will occupy seats at the right and left of the orator, and next to them will be seated the Secretary of the Senate and the Clerk of the House.

The other officers of the Senate and of the House will occupy seats on the floor, at the right and the left of the Speaker's platform.

Prayer will be offered by the Rev. F. D. Power, Chaplain of the House of Representatives.

The presiding officer will then present the orator of the day.

The benediction will be pronounced by the Rev. J. J. Bullock, Chaplain of the Senate.

By reason of the limited capacity of the galleries the number of tickets is necessarily restricted, and will be distributed as follows:

To each Senator, Representative, and Delegate, three tickets.

No person will be admitted to the Capitol except on presentation of a ticket, which will be good only for the place indicated.

The Architect of the Capitol and the Sergeant-at-Arms of the Senate and Sergeant-at-Arms of the House are charged with the execution of these arrangements.

JOHN SHERMAN,

WM. McKINLEY, Jr.,

Chairmen Joint Committee.

The President *pro tempore* of the Senate called the two Houses to order.

Rev. F. D. Power, Chaplain of the House of Representatives, offered prayer, as follows:

#### PRAYER.

O Lord our God, we thank thee for this hour and for this service. We thank thee for a great life given to this nation; for its genius and potencies; for its example and memories; for its immortality and eternity. May this republic never forget its dead!

As we come together this day to recall the wisdom, the integrity, the statesmanship, the loyalty, the reverence for thee and thy word, the unselfish love for country and for all mankind, wherewith thou didst endow thy servant and fit him for the administration of the affairs of the Government; as we meditate upon the patience, the sweetness, the fortitude, the faith, the quiet resignation to thy will wherewith thou didst fit him for his sore trial; as we remember his triumph and our sorrow, grant us thy gracious benediction.

We bear, during this memorial service, our Father,

before thee, on our hearts, his loved ones with whom we weep. Sustain, we beseech thee, the mother who bore him. May the peace of God that passeth all understanding be the strength and the crown of her spirit. Be very merciful to the wife in her present separation from the husband of her youth. May she rest in God, and may she find such sympathy and joy in her Saviour as the world can not give nor take away. Be a father to the children now fatherless, and may they imitate the virtues of their illustrious parent, and like him be useful in living and mourned in dying. May the youth of this land and of all lands feel the power of his example and follow in his footsteps. May those who rule among us and among men everywhere by the study of his virtues be incited to like patriotism and piety.

Now we ask thy blessing on this assembly. May the remembrance of this great life be a genuine help to all those present and that greater audience waiting without. Give grace and utterance to thy servant who shall speak to us. May his words be wise and worthy and fitly chosen, like apples of gold in pictures of silver.

Remember thy servant before thee, the President of the United States. Preserve him from evil influences and evil men. May truth rest upon his brow, wisdom upon his lips, justice in his hands, and grace in his heart. Bless his counselors, this Congress assembled, our magistrates and judges, our Army and Navy, our schools and churches, our whole land and all the inhabitants thereof.

May we keep alive in us the faith and virtue of those who have passed before. Give peace in our time. Make religion and righteousness, truth and justice, knowledge and freedom to abound everywhere. May thy name be glorified and thy kingdom rule over us from sea to sea.

We ask it all reverently, through Jesus Christ our Lord. Amen.

The President *pro tempore* of the Senate: "Senators and Representatives, this day is dedicated by Congress for memorial services upon the late President James A. Garfield. I present to you Hon. James G. Blaine, who has been fitly chosen as the orator for this historical occasion."

Mr. Blaine (who was greeted with hearty applause) delivered the following oration:

#### ORATION.

"Mr. President: For the second time in this generation the great departments of the Government of the United States are assembled in the hall of Representatives to do honor to the memory of a murdered President. Lincoln fell at the close of a mighty struggle in which the passions of men had been deeply stirred. The tragical termination of his great life added but another to the lengthened succession of horrors which had marked so many lintels with the blood of the first-born. Garfield was slain in a day of peace, when brother had been reconciled to brother, and when anger and hate had been banished from the land. 'Whoever shall hereafter draw the portrait of murder, if he will show it as it has been exhibited where such example was last to have been looked for, let him not give it the grim visage of Moloch, the brow knitted by revenge, the face black with settled hate. Let him draw, rather, a decorous, smooth-faced, bloodless demon; not so much an example of human nature in its depravity and in its paroxysms of crime, as an infernal being, a fiend in the ordinary display and development of his character.'

"From the landing of the Pilgrims at Plymouth till the uprising against Charles I, about twenty thousand emigrants came from Old England to New England. As they came in pursuit of intellectual freedom and ecclesiastical independence rather than for worldly honor and profit, the emigration naturally ceased



when the contest for religious liberty began in earnest at home. The man who struck his most effective blow for freedom of conscience by sailing for the colonies in 1620 would have been accounted a deserter to leave after 1640. The opportunity had then come on the soil of England for that great contest which established the authority of Parliament, gave religious freedom to the people, sent Charles to the block, and committed to the hands of Oliver Cromwell the supreme executive authority of England. The English emigration was never renewed, and from these twenty thousand men, with a small emigration from Scotland and from France, are descended the vast numbers who have New England blood in their veins.

"In 1685 the revocation of the Edict of Nantes by Louis XIV scattered to other countries four hundred thousand Protestants, who were among the most intelligent and enterprising of French subjects—merchants of capital, skilled manufacturers, and handicraftsmen, superior at the time to all others in Europe. A considerable number of these Huguenot French came to America; a few landed in New England and became honorably prominent in its history. Their names have in large part become anglicized, or have disappeared, but their blood is traceable in many of the most reputable families, and their fame is perpetuated in honorable memorials and useful institutions."

#### ANCESTORS.

"From these two sources, the English-Puritan and the French-Huguenot, came the late President—his father, Abram Garfield, being descended from the one, and his mother, Eliza Ballou, from the other.

"It was good stock on both sides—none better, none braver, none truer. There was in it an inheritance of courage, of manliness, of imperishable love of liberty, of undying adherence to principle. Garfield was proud of his blood; and with as much satisfaction as if he were a British nobleman reading his stately ancestral record in Burke's 'Peerage,' he spoke of himself as ninth in descent from those who would not endure the oppression of the Stuarts, and seventh in descent from the brave French Protestants who refused to submit to tyranny even from the Grand Monarque.

"General Garfield delighted to dwell on these traits, and, during his only visit to England, he busied himself in discovering every trace of his forefathers in parish registries and on ancient army rolls. Sitting with a friend in the gallery of the House of Commons, one night, after a long day's labor in this field of research, he said, with evident elation, that in every war in which for three centuries patriots of English blood had struck sturdy blows for constitutional government and human liberty, his family had been represented. They were at Marston Moor, at Naseby, and at Preston; they were at Bunker Hill, at Saratoga, and at Monmouth, and in his own person had battled for the same great cause in the war which preserved the Union of the States."

#### EARLY AGE.

"Losing his father before he was two years old, the early life of Garfield was one of privation, but its poverty has been made indelicately and unjustly prominent. Thousands of readers have imagined him as the ragged, starving child, whose reality too often greets the eye in the squalid sections of our large cities. General Garfield's infancy and youth had none of their destitution, none of their pitiful features appealing to the tender heart and to the open hand of charity. He was a poor boy in the same sense in which Henry Clay was a poor boy; in which Andrew Jackson was a poor boy; in which Daniel Webster was a poor boy; in the sense in which a large majority of the eminent men of America in all generations have been poor boys. Before a great multitude of men, in a public speech, Mr. Webster bore this testimony:

It did not happen to me to be born in a log-cabin, but my elder brothers and sisters were born in a log-cabin raised amid the snow-drifts of New Hampshire, at a period so early that when the smoke rose first from its rude chimney and curled

over the frozen hills there was no similar evidence of a white man's habitation between it and the settlements on the rivers of Canada. Its remains still exist. I make it to it an annual visit. I carry my children to it to teach them the hardships endured by the generations which have gone before them. I love to dwell on the tender recollections, the kindred ties, the early affections, and the touching narratives and incidents which mingle with all I know of this primitive family abode.

"With the requisite change of scene the same words would aptly portray the early days of Garfield. The poverty of the frontier, where all are engaged in a common struggle and where a common sympathy and hearty co-operation lighten the burdens of each, is a very different poverty, different in kind, different in influence and effect from that conscious and humiliating indigence which is every day forced to contrast itself with neighboring wealth on which it feels a sense of grinding dependence. The poverty of the frontier is indeed no poverty. It is but the beginning of wealth, and has the boundless possibilities of the future always opening before it. No man ever grew up in the agricultural regions of the West where a house-raising, or even a corn-husking, is matter of common interest and helpfulness, with any other feeling than that of broad-minded, generous independence. This honorable independence marked the youth of Garfield as it marks the youth of millions of the best blood and brain now training for the future citizenship and future government of the republic. Garfield was born heir to land, to the title of freeholder, which has been the patent and passport of self-respect with the Anglo-Saxon race ever since Hengist and Horsa landed on the shores of England. His adventure on the canal—an alternative between that and the deck of a Lake Erie schooner—was a farmer's boy's device for earning money, just as the New England lad begins a possibly great career by sailing before the mast on a coasting-vessel or on a merchantman bound to the farther India or to the China seas.

"No manly man feels anything of shame in looking back to early struggles with adverse circumstances, and no man feels a worthier pride than when he has conquered the obstacles to his progress. But no one of noble mold desires to be looked upon as having occupied a menial position, as having been repressed by a feeling of inferiority, or as having suffered the evils of poverty until relief was found at the hand of charity. General Garfield's youth presented no hardships which family love and family energy did not overcome, subjected him to no privations which he did not cheerfully accept, and left no memories save those which were recalled with delight, and transmitted with profit and with pride."

#### EDUCATION.

"Garfield's early opportunities for securing an education were extremely limited, and yet were sufficient to develop in him an intense desire to learn. He could read at three years of age, and each winter he had the advantage of the district school. He read all the books to be found within the circle of his acquaintance; some of them he got by heart. While yet in childhood he was a constant student of the Bible, and became familiar with its literature. The dignity and earnestness of his speech in his maturer life gave evidence of this early training. At eighteen years of age he was able to teach school, and thenceforward his ambition was to obtain a college education. To this end he bent all his efforts, working in the harvest-field, at the carpenter's bench, and, in the winter season, teaching the common schools of the neighborhood. While thus laboriously occupied he found time to prosecute his studies, and was so successful that at twenty-two years of age he was able to enter the junior class at Williams College, then under the presidency of the venerable and honored Mark Hopkins, who, in the fullness of his powers, survives the eminent pupil to whom he was of inestimable service.

"The history of Garfield's life to this period presents no novel features. He had undoubtedly shown perseverance, self-reliance, self-sacrifice, and ambition—qualities which, be it said for the honor of our



country, are everywhere to be found among the young men of America. But from his graduation at Williams onward, to the hour of his tragical death, Garfield's career was eminent and exceptional. Slowly working through his educational period, receiving his diploma when twenty-four years of age, he seemed at one bound to spring into conspicuous and brilliant success. Within six years he was successively president of a college, State Senator of Ohio, major-general of the Army of the United States, and Representative-elect to the National Congress. A combination of honors so varied, so elevated, within a period so brief and to a man so young, is without precedent or parallel in the history of the country."

#### ARMY LIFE.

"Garfield's army life was begun with no other military knowledge than such as he had hastily gained from books in the few months preceding his march to the field. Stepping from civil life to the head of a regiment, the first order he received when ready to cross the Ohio was to assume command of a brigade, and to operate as an independent force in Eastern Kentucky. His immediate duty was to check the advance of Humphrey Marshall, who was marching down the Big Sandy with the intention of occupying, in connection with other Confederate forces, the entire territory of Kentucky, and of precipitating the State into secession. This was at the close of the year 1861. Seldom, if ever, has a young college professor been thrown into a more embarrassing and discouraging position. He knew just enough of military science, as he expressed it himself, to measure the extent of his ignorance, and with a handful of men he was marching, in rough winter weather, into a strange country, among a hostile population, to confront a largely superior force under the command of a distinguished graduate of West Point, who had seen active and important service in two preceding wars.

"The result of the campaign is matter of history. The skill, the endurance, the extraordinary energy shown by Garfield, the courage he imparted to his men, raw and untried as himself, the measures he adopted to increase his force and to create in the enemy's mind exaggerated estimates of his numbers, bore perfect fruit in the routing of Marshall, the capture of his camp, the dispersion of his force, and the emancipation of an important territory from the control of the rebellion. Coming at the close of a long series of disasters to the Union arms, Garfield's victory had an unusual and extraneous importance, and in the popular judgment elevated the young commander to the rank of a military hero. With less than two thousand men in his entire command, with a mobilized force of only eleven hundred, without cannon, he had met an army of five thousand and defeated them—driving Marshall's forces successively from two strongholds of their own selection, fortified with abundant artillery. Major-General Buell, commanding the Department of the Ohio, an experienced and able soldier of the regular Army, published an order of thanks and congratulation on the brilliant result of the Big Sandy campaign, which would have turned the head of a less cool and sensible man than Garfield. Buell declared that his services had called into action the highest qualities of a soldier, and President Lincoln supplemented these words of praise by the more substantial reward of a brigadier-general's commission, to bear date from the day of his decisive victory over Marshall.

"The subsequent military career of Garfield fully sustained its brilliant beginning. With his new commission he was assigned to the command of a brigade in the Army of the Ohio, and took part in the second and decisive day's fight in the great battle of Shiloh. The remainder of the year 1862 was not especially eventful to Garfield, as it was not to the armies with which he was serving. His practical sense was called into exercise in completing the task, assigned him by General Buell, of reconstructing bridges and re-establishing lines of railway communication for the army.

His occupation in this useful but not brilliant field was varied by service on courts-martial of importance, in which department of duty he won a valuable reputation, attracting the notice and securing the approval of the able and eminent Judge-Advocate-General of the Army. That of itself was warrant to honorable fame; for among the great men who in those trying days gave themselves, with entire devotion, to the service of their country, one who brought to that service the ripest learning, the most fervid eloquence, the most varied attainments, who labored with modesty and shunned applause, who in the day of triumph sat reserved and silent and grateful—as Francis Deak in the hour of Hungary's deliverance—was Joseph Holt, of Kentucky, who in his honorable retirement enjoys the respect and veneration of all who love the Union of the States.

"Early in 1863 Garfield was assigned to the highly important and responsible post of chief of staff to General Rosecrans, then at the head of the Army of the Cumberland. Perhaps in a great military campaign, no subordinate officer requires sounder judgment and quicker knowledge of men than the chief of staff to the commanding general. An indiscreet man in such a position can sow more discord, breed more jealousy, and disseminate more strife than any other officer in the entire organization. When General Garfield assumed his new duties he found various troubles already well developed and seriously affecting the value and efficiency of the Army of the Cumberland. The energy, the impartiality, and the tact with which he sought to allay these dissensions, and to discharge the duties of his new and trying position will always remain one of the most striking proofs of his great versatility. His military duties closed on the memorable field of Chickamauga, a field which, however disastrous to the Union arms, gave to him the occasion of winning imperishable laurels. The very rare distinction was accorded him of a great promotion for his bravery on a field that was lost. President Lincoln appointed him a major-general in the Army of the United States for gallant and meritorious conduct in the battle of Chickamauga.

"The Army of the Cumberland was reorganized under the command of General Thomas, who promptly offered Garfield one of its divisions. He was extremely desirous to accept the position, but was embarrassed by the fact that he had, a year before, been elected to Congress, and the time when he must take his seat was drawing near. He preferred to remain in the military service, and had within his own breast the largest confidence of success in the wider field which his new rank opened to him. Balancing the arguments on the one side and the other, anxious to determine what was for the best, desirous above all things to do his patriotic duty, he was decisively influenced by the advice of President Lincoln and Secretary Stanton, both of whom assured him that he could, at that time, be of especial value in the House of Representatives. He resigned his commission of major-general on the 5th day of December, 1863, and took his seat in the House of Representatives on the 7th. He had served two years and four months in the army, and had just completed his thirty-second year."

#### ELECTED TO CONGRESS.

"The Thirty-eighth Congress is pre-eminently entitled in history to the designation of the War Congress. It was elected while the war was flagrant, and every member was chosen upon the issues involved in the continuance of the struggle. The Thirty-seventh Congress had, indeed, legislated to a large extent on war measures, but it was chosen before any one believed that secession of the States would be actually attempted. The magnitude of the work which fell upon its successor was unprecedented, both in respect to the vast sums of money raised for the support of the army and navy, and of the new and extraordinary powers of legislation which it was forced to exercise. Only twenty-four States were represented, and one



hundred and eighty-two members were upon its roll. Among these were many distinguished party leaders on both sides, veterans in the public service, with established reputations for ability, and with that skill which comes only from parliamentary experience. Into this assemblage of men Garfield entered without special preparation, and it might almost be said unexpectedly. The question of taking command of a division of troops under General Thomas, or taking his seat in Congress, was kept open till the last moment, so late, indeed, that the resignation of his military commission and his appearance in the House were almost contemporaneous. He wore the uniform of a major-general of the United States Army on Saturday, and on Monday, in civilian's dress, he answered to the roll-call as a Representative in Congress from the State of Ohio.

"He was especially fortunate in the constituency which elected him. Descended almost entirely from New England stock, the men of the Ashtabula district were intensely radical on all questions relating to human rights. Well educated, thrifty, thoroughly intelligent in affairs, acutely discerning of character, not quick to bestow confidence, and slow to withdraw it, they were at once the most helpful and most exacting of supporters. Their tenacious trust in men in whom they have once confided is illustrated by the unparalleled fact that Elisha Whittlesey, Joshua R. Giddings, and James A. Garfield represented the district for fifty-four years.

"There is no test of a man's ability in any department of public life more severe than service in the House of Representatives; there is no place where so little deference is paid to reputation previously acquired, or to eminence won outside; no place where so little consideration is shown for the feelings or the failures of beginners. What a man gains in the House he gains by sheer force of his own character, and if he loses and falls back, he must expect no mercy, and will receive no sympathy. It is a field in which the survival of the strongest is the recognized rule, and where no pretense can deceive and no glamour can mislead. The real man is discovered, his worth is impartially weighed, his rank is irreversibly decreed.

"With possibly a single exception, Garfield was the youngest member in the House when he entered, and was but seven years from his college graduation. But he had not been in his seat sixty days before his ability was recognized and his place conceded. He stepped to the front with the confidence of one who belonged there. The House was crowded with strong men of both parties; nineteen of them have since been transferred to the Senate, and many of them have served with distinction in the gubernatorial chairs of their respective States, and on foreign missions of great consequence; but among them all none grew so rapidly, none so firmly, as Garfield. As is said by Trevelyan of his parliamentary hero, Garfield succeeded 'because all the world in concert could not have kept him in the background, and because, when once in the front, he played his part with a prompt intrepidity and a commanding ease that were but the outward symptoms of the immense reserves of energy on which it was in his power to draw.' Indeed, the apparently reserved force which Garfield possessed was one of his great characteristics. He never did so well but that it seemed he could easily have done better. He never expended so much strength but that he seemed to be holding additional power at call. This is one of the happiest and rarest distinctions of an effective debater, and often counts for as much in persuading an assembly as the eloquent and elaborate argument."

#### SERVICES IN THE HOUSE.

"The great measure of Garfield's fame was filled by his service in the House of Representatives. His military life, illustrated by honorable performance, and rich in promise, was, as he himself felt, prematurely terminated, and necessarily incomplete. Speculation as to what he might have done in a field where the

great prizes are so few, can not be profitable. It is sufficient to say that, as a soldier, he did his duty bravely; he did it intelligently; he won an enviable fame, and he retired from the service without blot or breath against him. As a lawyer, though admirably equipped for the profession, he can scarcely be said to have entered on its practice. The few efforts he made at the bar were distinguished by the same high order of talent which he exhibited on every field where he was put to the test; and, if a man may be accepted as a competent judge of his own capacities and adaptations, the law was the profession to which Garfield should have devoted himself. But fate ordained otherwise, and his reputation in history will rest largely upon his service in the House of Representatives. That service was exceptionally long. He was nine times consecutively chosen to the House, an honor enjoyed probably by not twenty other Representatives of the more than five thousand who have been elected from the organization of the Government to this hour.

"As a parliamentary orator, as a debater on an issue squarely joined, where the position had been chosen and the ground laid out, Garfield must be assigned a very high rank. More, perhaps, than any man with whom he was associated in public life, he gave careful and systematic study to public questions, and he came to every discussion in which he took part with elaborate and complete preparation. He was a steady and indefatigable worker. Those who imagine that talent or genius can supply the place or achieve the results of labor, will find no encouragement in Garfield's life. In preliminary work he was apt, rapid, and skillful. He possessed in a high degree the power of readily absorbing ideas and facts, and, like Dr. Johnson, had the art of getting from a book all that was of value in it, by a reading apparently so quick and cursory that it seemed like a mere glance at the table of contents. He was a pre-eminently fair and candid man in debate, took no petty advantage, stooped to no unworthy methods, avoided personal allusions, rarely appealed to prejudice, did not seek to inflame passion. He had a quicker eye for the strong point of his adversary than for his weak point; and, on his own side, he so marshaled his weighty arguments as to make his hearers forget any possible lack in the complete strength of his position. He had a habit of stating his opponent's side with such amplitude of fairness, and such liberality of concession, that his followers often complained that he was giving his case away. But never, in his prolonged participation in the proceedings of the House, did he give his case away, or fail, in the judgment of competent and impartial listeners, to gain the mastery.

"These characteristics, which marked Garfield as a great debater, did not, however, make him a great parliamentary leader. A parliamentary leader, as that term is understood wherever free representative government exists, is necessarily and very strictly the organ of his party. An ardent American defined the instinctive warmth of patriotism when he offered the toast, 'Our country, always right; but right or wrong, our country.' The parliamentary leader who has a body of followers that will do and dare and die for the cause, is one who believes his party always right, but, right or wrong, is for his party. No more important or exacting duty devolves upon him than the selection of the field and the time for contest. He must know not merely how to strike, but where to strike, and when to strike. He often skillfully avoids the strength of his opponent's position, and scatters confusion in his ranks by attacking an exposed point, when really the righteousness of the cause and the strength of logical intrenchment are against him. He conquers often both against the right and the heavy battalions; as, when young Charles Fox, in the days of his Toryism, carried the House of Commons against justice, against its immemorial rights, against his own convictions—if, indeed, at that period, Fox had convictions—and, in the interest of a corrupt administration, in obedience to a tyrannical sovereign, drove



Wilkes from the seat to which the electors of Middlesex had chosen him, and installed Luttrell, in defiance not merely of law, but of public decency. For an achievement of that kind Garfield was disqualified—disqualified by the texture of his mind, by the honesty of his heart, by his conscience, and by every instinct and aspiration of his nature.

"The three most distinguished parliamentary leaders hitherto developed in this country are Mr. Clay, Mr. Douglas, and Mr. Thaddeus Stevens. Each was a man of consummate ability, of great earnestness, of intense personality, differing widely each from the other, and yet with a single trait in common—the power to command. In the give-and-take of daily discussion, in the art of controlling and consolidating reluctant and refractory followers; in the skill to overcome all forms of opposition, and to meet, with competency and courage, the varying phases of unlooked-for assault or unsuspected defection, it would be difficult to rank with these a fourth name in all our congressional history. But of these Mr. Clay was the greatest. It would, perhaps, be impossible to find, in the parliamentary annals of the world, a parallel to Mr. Clay in 1841, when, at sixty-four years of age, he took the control of the Whig party from the President who had received their suffrages, against the power of Webster in the Cabinet, against the eloquence of Choate in the Senate, against the herculean efforts of Caleb Cushing and Henry A. Wise in the House. In unshared leadership, in the pride and plenitude of power, he hurled against John Tyler, with deepest scorn, the mass of that conquering column which had swept over the land in 1840, and drove his administration to seek shelter behind the lines of his political foes. Mr. Douglas achieved a victory scarcely less wonderful, when in 1854, against the secret desires of a strong administration, against the wise counsel of the older chiefs, against the conservative instincts and even the moral sense of the country, he forced a reluctant Congress into a repeal of the Missouri Compromise. Mr. Thaddeus Stevens, in his contests from 1865 to 1868, actually advanced his parliamentary leadership until Congress tied the hands of the President, and governed the country by its own will, leaving only perfunctory duties to be discharged by the Executive. With two hundred millions of patronage in his hands at the opening of the contest, aided by the active force of Seward in the Cabinet, and the moral power of Chase on the bench, Andrew Johnson could not command the support of one third in either House against the parliamentary uprising of which Thaddeus Stevens was the animating spirit and the unquestioned leader.

"From these three great men Garfield differed radically—differed in the quality of his mind, in temperament, in the form and phase of ambition. He could not do what they did, but he could do what they could not; and, in the breadth of his congressional work, he left that which will longer exert a potential influence among men, and which, measured by the severe test of posthumous criticism, will secure a more enduring and more enviable fame.

"Those unfamiliar with Garfield's industry, and ignorant of the details of his work, may, in some degree, measure them by the annals of Congress. No one of the generation of public men to which he belonged has contributed so much that will be valuable for future reference. His speeches are numerous, many of them brilliant, all of them well studied, carefully phrased, and exhaustive of the subject under consideration. Collected from the scattered pages of ninety royal-octavo volumes of congressional record, they would present an invaluable compendium of the political history of the most important era through which the National Government has ever passed. When the history of this period shall be impartially written, when war legislation, measures of reconstruction, protection of human rights, amendments to the Constitution, maintenance of public credit, steps toward specie resumption, true theories of revenue may be reviewed, unsurrounded by prejudice, and disconnected from

partisanism, the speeches of Garfield will be estimated at their true value, and will be found to comprise a vast magazine of fact and argument, of clear analysis and sound conclusion. Indeed, if no other authority were accessible, his speeches in the House of Representatives, from December, 1863, to June, 1880, would give a well-connected history, and complete defense of the important legislation of the seventeen eventful years that constitute his parliamentary life. Far beyond that, his speeches would be found to forecast many great measures yet to be completed—measures which he knew were beyond the public opinion of the hour, but which he confidently believed would secure popular approval within the period of his own lifetime, and by the aid of his own efforts.

"Differing, as Garfield does, from the brilliant parliamentary leaders, it is not easy to find his counterpart anywhere in the record of American public life. He, perhaps, more nearly resembles Mr. Seward in his supreme faith in the all-conquering power of a principle. He had the love of learning, and the patient industry of investigation, to which John Quincy Adams owes his prominence and his presidency. He had some of those ponderous elements of mind which distinguished Mr. Webster, and which, indeed, in all our public life have left the great Massachusetts Senator without an intellectual peer.

"In English parliamentary history, as in our own, the leaders in the House of Commons present points of essential difference from Garfield. But some of his methods recall the best features in the strong, independent course of Sir Robert Peel, and striking resemblances are discernible in that most promising of modern Conservatives, who died too early for his country and his fame, the Lord George Bentinck. He had all of Burke's love for the sublime and the beautiful, with, possibly, something of his superabundance; and in his faith and his magnanimity, in his power of statement, in his subtle analysis, in his faultless logic, in his love of literature, in his wealth and world of illustration, one is reminded of that great English statesman of to-day, who, confronted with obstacles that would daunt any but the dauntless, reviled by those whom he would relieve as bitterly as by those whose supposed rights he is forced to invade, still labors with serene courage for the amelioration of Ireland and for the honor of the English name."

#### NOMINATION FOR PRESIDENCY.

"Garfield's nomination to the presidency, while not predicted or anticipated, was not a surprise to the country. His prominence in Congress, his solid qualities, his wide reputation, strengthened by his then recent election as Senator from Ohio, kept him in the public eye as a man occupying the very highest rank among those entitled to be called statesmen. It was not mere chance that brought him this high honor. 'We must,' says Mr. Emerson, 'reckon success a constitutional trait. If Eric is in robust health and has slept well and is at the top of his condition, and thirty years old at his departure from Greenland, he will steer west and his ships will reach Newfoundland. But take Eric out and put in a stronger and bolder man and the ships will sail six hundred, one thousand, fifteen hundred miles farther and reach Labrador and New England. There is no chance in results.'

"As a candidate, Garfield steadily grew in popular favor. He was met with a storm of detraction at the very hour of his nomination, and it continued with increasing volume and momentum until the close of his victorious campaign:

'No might nor greatness in mortality  
Can censure 'scape; backwounding calumny  
The whitest virtue strikes. What king so strong  
Can tie the gall up in the slanderous tongue?'

"Under it all he was calm, and strong, and confident; never lost his self-possession, did no unwise act, spoke no hasty or ill-considered word. Indeed, nothing in his whole life is more remarkable or more



creditable than his bearing through those five full months of vituperation—a prolonged agony of trial to a sensitive man, a constant and cruel draft upon the powers of moral endurance. The great mass of these unjust imputations passed unnoticed, and with the general *debris* of the campaign fell into oblivion. But in a few instances the iron entered his soul, and he died with the injury unforgetten if not unforgiven.

"One aspect of Garfield's candidacy was unprecedented. Never before, in the history of partisan contests in this country, had a successful presidential candidate spoken freely on passing events and current issues. To attempt anything of the kind seemed novel, rash, and even desperate. The older class of voters recalled the unfortunate Alabama letter, in which Mr. Clay was supposed to have signed his political death-warrant. They remembered also the hot-tempered effusion by which General Scott lost a large share of his popularity before his nomination, and the unfortunate speeches which rapidly consumed the remainder. The younger voters had seen Mr. Greeley in a series of vigorous and original addresses preparing the pathway for his own defeat. Unmindful of these warnings, unheeding the advice of friends, Garfield spoke to large crowds as he journeyed to and from New York in August, to a great multitude in that city, to delegations and deputations of every kind that called at Mentor during the summer and autumn. With innumerable critics, watchful and eager to catch a phrase that might be turned into odium or ridicule, or a sentence that might be distorted to his own or his party's injury, Garfield did not trip or halt in any one of his seventy speeches. This seems all the more remarkable when it is remembered that he did not write what he said, and yet spoke with such logical consecutiveness of thought and such admirable precision of phrase as to defy the accident of misreport and the malignity of misrepresentation."

#### AS PRESIDENT.

"In the beginning of his presidential life, Garfield's experience did not yield him pleasure or satisfaction. The duties that engross so large a portion of the President's time were distasteful to him, and were unfavorably contrasted with his legislative work. 'I have been dealing all these years with ideas,' he impatiently exclaimed one day, 'and here I am dealing only with persons. I have been heretofore treating of the fundamental principles of government, and here I am considering all day whether A or B shall be appointed to this or that office.' He was earnestly seeking some practical way of correcting the evils arising from the distribution of overgrown and unwieldy patronage—evils always appreciated and often discussed by him, but whose magnitude had been more deeply impressed upon his mind since his accession to the presidency. Had he lived, a comprehensive improvement in the mode of appointment and in the tenure of office would have been proposed by him, and with the aid of Congress no doubt perfected.

"But, while many of the Executive duties were not grateful to him, he was assiduous and conscientious in their discharge. From the very outset he exhibited administrative talent of a high order. He grasped the helm of office with the hand of a master. In this respect, indeed, he constantly surprised many who were most intimately associated with him in the Government, and especially those who had feared that he might be lacking in the executive faculty. His disposition of business was orderly and rapid. His power of analysis, and his skill in classification, enabled him to dispatch a vast mass of detail with singular promptness and ease. His Cabinet meetings were admirably conducted. His clear presentation of official subjects, his well-considered suggestion of topics on which discussion was invited, his quick decision when all had been heard, combined to show a thoroughness of mental training as rare as his natural ability and his facile adaptation to a new and enlarged field of labor.

"With perfect comprehension of all the inheritances of the war, with a cool calculation of the obstacles in

his way, impelled always by a generous enthusiasm, Garfield conceived that much might be done by his administration toward restoring harmony between the different sections of the Union. He was anxious to go South and speak to the people. As early as April he had ineffectually endeavored to arrange for a trip to Nashville, whither he had been cordially invited, and he was again disappointed a few weeks later to find that he could not go to South Carolina to attend the centennial celebration of the victory of the Cowpens. But for the autumn he definitely counted on being present at three memorable assemblies in the South, the celebration at Yorktown, the opening of the Cotton Exposition at Atlanta, and the meeting of the Army of the Cumberland at Chattanooga. He was already turning over in his mind his address for each occasion, and the three taken together, he said to a friend, gave him the exact scope and verge which he needed. At Yorktown he would have before him the associations of a hundred years that bound the South and the North in the sacred memory of a common danger and a common victory. At Atlanta he would present the material interests and the industrial development which appealed to the thrift and independence of every household, and which should unite the two sections by the instinct of self-interest and self-defense. At Chattanooga he would revive memories of the war only to show that after all its disaster and all its suffering, the country was stronger and greater, the Union rendered indissoluble, and the future, through the agony and blood of one generation, made brighter and better for all.

"Garfield's ambition for the success of his administration was high. With strong caution and conservatism in his nature, he was in no danger of attempting rash experiments or of resorting to the empiricism of statesmanship. But he believed that renewed and closer attention should be given to questions affecting the material interests and commercial prospects of fifty millions of people. He believed that our continental relations, extensive and undeveloped as they are, involved responsibility, and could be cultivated into profitable friendship or be abandoned to harmful indifference or lasting enmity. He believed with equal confidence that an essential forerunner to a new era of national progress must be a feeling of contentment in every section of the Union, and a generous belief that the benefits and burdens of government would be common to all. Himself a conspicuous illustration of what ability and ambition may do under republican institutions, he loved his country with a passion of patriotic devotion, and every waking thought was given to her advancement. He was an American in all his aspirations, and he looked to the destiny and influence of the United States with the philosophic composure of Jefferson and the demonstrative confidence of John Adams.

"The political events which disturbed the President's serenity for many weeks before that fatal day in July form an important chapter in his career, and, in his own judgment, involved questions of principle and of right which are vitally essential to the constitutional administration of the Federal Government. It would be out of place here and now to speak the language of controversy; but the events referred to, however they may continue to be a source of contention with others, have become, so far as Garfield is concerned, as much a matter of history as his heroism at Chickamauga or his illustrious service in the House. Detail is not needful, and personal antagonism shall not be rekindled by any word uttered to-day. The motives of those opposing him are not to be here adversely interpreted nor their course harshly characterized. But of the dead President this is to be said, and said because his own speech is for ever silenced and he can be no more heard except through the fidelity and the love of surviving friends: from the beginning to the end of the controversy he so much deplored, the President was never for one moment actuated by any motive of gain to himself or of loss to others. Least of all men did he harbor revenge, rarely did he even



show resentment, and malice was not in his nature. He was congenially employed only in the exchange of good offices and the doing of kindly deeds.

"There was not an hour, from the beginning of the trouble till the fatal shot entered his body, when the President would not gladly, for the sake of restoring harmony, have retraced any step he had taken if such retracing had merely involved consequences personal to himself. The pride of consistency, or any supposed sense of humiliation that might result from surrendering his position, had not a feather's weight with him. No man was ever less subject to such influences from within or from without. But after most anxious deliberation and the coolest survey of all the circumstances, he solemnly believed that the true prerogatives of the Executive were involved in the issue which had been raised, and that he would be unfaithful to his supreme obligation if he failed to maintain, in all their vigor, the constitutional rights and dignities of his great office. He believed this in all the convictions of conscience when in sound and vigorous health, and he believed it in his suffering and prostration in the last conscious thought which his wearied mind bestowed on the transitory struggles of life.

"More than this need not be said. Less than this could not be said. Justice to the dead, the highest obligation that devolves upon the living, demands the declaration that in all the bearings of the subject, actual or possible, the President was content in his mind, justified in his conscience, immovable in his conclusions."

#### RELIGIOUS VIEWS.

"The religious element in Garfield's character was deep and earnest. In his early youth he espoused the faith of the Disciples, a sect of that great Baptist communion which in different ecclesiastical establishments is so numerous and so influential throughout all parts of the United States. But the broadening tendency of his mind and his active spirit of inquiry were early apparent and carried him beyond the dogmas of sect and the restraints of association. In selecting a college in which to continue his education he rejected Bethany, though presided over by Alexander Campbell, the greatest preacher of his church. His reasons were characteristic: first, that Bethany leaned too heavily toward slavery; and, second, that being himself a Disciple and the son of Disciple parents, he had little acquaintance with people of other beliefs, and he thought it would make him more liberal, quoting his own words, both in his religious and general views, to go into a new circle and be under new influences.

"The liberal tendency which he anticipated as the result of wider culture was fully realized. He was emancipated from mere sectarian belief, and with eager interest pushed his investigations in the direction of modern progressive thought. He followed with quickening step in the paths of exploration and speculation so fearlessly trodden by Darwin, by Huxley, by Tyndall, and by other living scientists of the radical and advanced type. His own church, binding its disciples by no formulated creed, but accepting the Old and New Testaments as the word of God with unbiased liberality of private interpretation, favored, if it did not stimulate, the spirit of investigation. Its members profess with sincerity, and profess only, to be of one mind and one faith with those who immediately followed the Master, and who were first called Christians at Antioch.

"But however high Garfield reasoned of 'fixed fate, free-will, foreknowledge absolute,' he was never separated from the Church of the Disciples in his affections and in his associations. For him it held the ark of the covenant. To him it was the gate of heaven. The world of religious belief is full of solecisms and contradictions. A philosophic observer declares that men by the thousand will die in defense of a creed whose doctrines they do not comprehend and whose tenets they habitually violate. It is equally true that men by the thousand will cling to church organiza-

tions with instinctive and undying fidelity when their belief in maturer years is radically different from that which inspired them as neophytes.

"But after this range of speculation, and this latitude of doubt, Garfield came back always with freshness and delight to the simpler instincts of religious faith, which, earliest implanted, longest survive. Not many weeks before his assassination, walking on the banks of the Potomac with a friend, and conversing on those topics of personal religion, concerning which noble natures have an unconquerable reserve, he said that he found the Lord's Prayer and the simple petitions learned in infancy infinitely restful to him, not merely in their stated repetition, but in their casual and frequent recall as he went about the daily duties of life. Certain texts of Scripture had a very strong hold on his memory and his heart. He heard, while in Edinburgh some years ago, an eminent Scotch preacher who prefaced his sermon with reading the eighth chapter of the Epistle to the Romans, which book had been the subject of careful study with Garfield during all his religious life. He was greatly impressed by the elocution of the preacher, and declared that it had imparted a new and deeper meaning to the majestic utterances of St. Paul. He referred often in after-years to that memorable service, and dwelt with exaltation of feeling upon the radiant promise and the assured hope with which the great apostle of the Gentiles was 'persuaded that neither death, nor life, nor angels, nor principalities, nor powers, nor things present, nor things to come, nor height, nor depth, nor any other creature, shall be able to separate us from the love of God, which is in Christ Jesus our Lord.'

"The crowning characteristic of General Garfield's religious opinions, as, indeed, of all his opinions, was his liberality. In all things he had charity. Tolerance was of his nature. He respected in others the qualities which he possessed himself—sincerity of conviction and frankness of expression. With him the inquiry was not so much what a man believes, but does he believe it? The lines of his friendship and his confidences encircled men of every creed and men of no creed, and to the end of his life, on his ever-lengthening list of friends, were to be found the names of a pious Catholic priest and of an honest-minded and generous-hearted free-thinker."

#### THE END.

"On the morning of Saturday, July 2d, the President was a contented and happy man—not in an ordinary degree, but joyfully, almost boyishly happy. On his way to the railroad station to which he drove slowly, in conscious enjoyment of the beautiful morning, with an unwonted sense of leisure and a keen anticipation of pleasure, his talk was all in the grateful and gratulatory vein. He felt that after four months of trial his administration was strong in its grasp of affairs, strong in popular favor, and destined to grow stronger; that grave difficulties confronting him at his inauguration had been safely passed; that trouble lay behind him and not before him; that he was soon to meet the wife whom he loved, now recovering from an illness which had but lately disquieted and at times almost unnerved him; that he was going to his Alma Mater to renew the most cherished associations of his young manhood, and to exchange greetings with those whose deepening interest had followed every step of his upward progress from the day he entered upon his college course until he had attained the loftiest elevation in the gift of his countrymen.

"Surely, if happiness can ever come from the honors or triumphs of this world, on that quiet July morning James A. Garfield may well have been a happy man. No foreboding of evil haunted him; no slightest premonition of danger clouded his sky. His terrible fate was upon him in an instant. One moment he stood erect, strong, confident in the years stretching peacefully out before him. The next he lay wounded, bleeding, helpless, doomed to weary weeks of torture, to silence, and the grave.

"Great in life, he was surpassingly great in death.



For no cause, in the very frenzy of wantonness and wickedness, by the red hand of murder, he was thrust from the full tide of this world's interest, from its hopes, its aspirations, its victories, into the visible presence of death—and he did not quail. Not alone for the one short moment in which, stunned and dazed, he could give up life, hardly aware of its relinquishment, but through days of deadly languor, through weeks of agony, that was not less agony because silently borne, with clear sight and calm courage, he looked into his open grave. What blight and ruin met his anguished eyes, whose lips may tell—what brilliant, broken plans, what baffled, high ambitions, what sundering of strong, warm, manhood's friendships, what bitter rending of sweet household ties! Behind him a proud, expectant nation, a great host of sustaining friends, a cherished and happy mother, wearing the full, rich honors of her early toil and tears; the wife of his youth, whose whole life lay in his; the little boys not yet emerged from childhood's day of frolic; the fair young daughter; the sturdy sons just springing into closest companionship, claiming every day and every day rewarding a father's love and care; and in his heart the eager, rejoicing power to meet all demand. Before him, desolation and great darkness! And his soul was not shaken. His countrymen were thrilled with instant, profound, and universal sympathy. Masterful in his mortal weakness, he became the center of a nation's love, enshrined in the prayers of a world. But all the love and all the sympathy could not share with him his suffering. He trod the wine-press alone. With unflinching front he faced death. With unfailing tenderness he took leave of life. Above the demoniac hiss of the assassin's bullet he heard the voice of God. With simple resignation he bowed to the divine decree.

"As the end drew near, his early craving for the sea returned. The stately mansion of power had been to him the wearisome hospital of pain, and he begged to be taken from its prison-walls, from its oppressive, stifling air, from its homelessness and its hopelessness. Gently, silently, the love of a great people bore the pale sufferer to the longed-for healing of the sea, to live or to die, as God should will, within sight of its heaving billows, within sound of its manifold voices. With wan, fevered face tenderly lifted to the cooling breeze, he looked out wistfully upon the ocean's changing wonders; on its far sails, whitening in the morning light; on its restless waves, rolling shoreward to break and die beneath the noonday sun; on the red clouds of evening, arching low to the horizon; on the serene and shining pathway of the stars. Let us think that his dying eyes read a mystic meaning which only the rapt and parting soul may know. Let us believe that in the silence of the receding world he heard the great waves breaking on a farther shore, and felt already upon his wasted brow the breath of the eternal morning."

[The orator on concluding was greeted with most hearty applause, in which the whole audience joined.]

Rev. J. J. Bullock, the Chaplain of the Senate, pronounced the benediction, as follows:

"May the peace of God, which passeth all understanding, keep your minds and hearts in the knowledge and love of God and his Son, Jesus Christ, our Lord. And the blessing of God Almighty, the Father, the Son, and the Holy Ghost, rest upon and remain with you, now and for evermore. Amen."

The President and his Cabinet, the Chief-Justice and associate justices of the Supreme Court, and other invited guests then retired from the hall; after which the Senate returned to their chamber.

The House having been called to order—

Mr. McKinley, of Ohio, submitted the fol-

lowing resolutions, which were unanimously adopted:

*Resolved (the Senate concurring),* That the thanks of Congress be presented to Hon. James G. Blaine, for the appropriate memorial address delivered by him on the life and services of James Abram Garfield, late President of the United States, in the Representatives' hall, before both Houses of Congress and their invited guests, on the 27th day of February, 1882; and that he be requested to furnish a copy for publication.

*Resolved,* That the chairmen of the joint committee appointed to make the necessary arrangements to carry into effect the resolutions of this Congress in relation to the memorial exercises in honor of James Abram Garfield be requested to communicate to Mr. Blaine the foregoing resolution, receive his answer thereto, and present the same to both Houses of Congress.

Mr. McKinley: "I now offer the resolution which I send to the Clerk's desk."

The Clerk read as follows:

*Resolved,* That as a further testimonial of respect to the deceased President of the United States, the House do now adjourn.

The resolution was adopted; and thereupon (at one o'clock and fifty-five minutes P. M.) the House adjourned.

**WOMAN SUFFRAGE.**—In the Senate, on December 14th, Mr. Hoar, of Massachusetts, moved to take up the following resolution reported by the Committee on Rules:

*Resolved,* That a select committee of seven Senators be appointed by the Chair, to whom shall be referred all petitions, bills, and resolves providing for the extension of suffrage to women or the removal of their legal disabilities.

The President *pro tempore*: "The resolution is before the Senate for consideration."

Mr. Vest, of Missouri: "Mr. President, I am constrained to object to the passage of this resolution, and I do it with considerable reluctance. At present we have thirty standing committees of the Senate, and we have four joint committees and seven special committees, in addition to the committee now proposed.

"But, Mr. President, I will be entirely ingenuous and give another reason. This is simply a step toward the recognition of woman suffrage, and I am opposed to it upon principle in its inception. In my judgment it has nothing but mischief in it to the institutions and to the society of this whole country. I do not propose to enter into a discussion of that subject to-day, but it will be proper for me to make this statement, and I make it intending no reflection upon the zealous ladies who have engaged for the past ten years in manufacturing a public sentiment upon this question. I received to-day a letter from a distinguished lady in my own State, for whom I have personally the greatest admiration and respect, calling my attention to the fact that I propose to deny justice to the women of the country. Mr. President, I deny it. It is because I believe that the conservative influence of society in the United States rests with the women of



the country that I propose not to degrade the wife and mother to the ward politician, the justice of the peace, or the notary public. It is because I believe honestly that all the best influences for the conservatism of society rest upon the women of the country in their proper sphere, that I shall oppose this and every other step now and henceforth as violating, as I believe, one of the great essential fundamental laws of nature and of society.

"Mr. President, the revenges of nature are sure and unerring, and these revenges are just as certain in political matters and in social matters as in the physical world. Now and here I desire to record once for all my conviction that in this movement to take the women of the country out of their proper sphere of social influence, that great and glorious sphere in which nature and nature's God have placed them, and rush them into the political arena, the attempt is made to put them where they were never intended to be; and I now and here record my opposition to it. This may seem to be but a small matter, but as this letter shows, and I reveal no private confidence, it recognizes the first great step in this reform, as its advocates are pleased to term it."

Mr. Hoar: "Mr. President, I do not understand that the question which the honorable Senator from Missouri has discussed with so much eloquence is before the Senate. No question of the extension of suffrage to any portion of our citizens is raised by the resolution which is before the Senate. The only question now is, first, whether Senators like the honorable Senator from Missouri will prefer to decide this question before it is heard or after; and next, whether if one half the population of this country have an interest which their representatives desire to present to Congress, it will be more convenient to give them a hearing by one of the standing committees of the Senate or by a separate committee appointed for that purpose. I suppose the Judiciary Committee would be entirely competent, and would be for many reasons entirely appropriate, as the proper organ of the Senate to hear the requests of these ladies; but the Judiciary Committee is crowded with great subjects, and as one very intelligent Senator observed to me, yesterday, 'Send the matter to the Judiciary Committee, for they never report on anything.' This committee is proposed, not alone to hear any representation or arguments which may be proper to be heard in regard to the question of woman suffrage, but in regard to all subjects where these ladies think their sex lies under an improper legal disability.

"Mr. President, I suppose that the wildest conservative in this country will not deny that the old common law in defining the rights and duties of English and American women was not only unjust but almost brutal. No matter what might be the degradation of the husband, the person, the earnings, the personal prop-

erty, the real estate for life of the wife were absolutely in his power.

"The discussion of this class of questions has convinced the American people, I believe, to an absolute unanimity of judgment, that the law which permitted the husband to beat his wife with a rod, which varied in size with the thumb of the lord chief-justice or chancellor, which denied her the right to secure the earnings of her own day's work, which denied her any voice or control in the education, or custody, or direction of the children which she had borne, was not only unjust but almost brutal.

"Within our national jurisdiction, with Congress organizing the institutions of the great Territories which are to become imperial States, is it not fitting that that class of considerations should be gravely, fully, adequately considered? If so, I do not see why the honorable Senator from Missouri (who I know entertains as high and chivalrous a regard for the sex to which our mothers and sisters and wives belong as any man on this floor) should not unite with me in providing for giving a respectful and thorough hearing, which it is impossible that any of the standing committees of this body can do, to the petitioners on this class of subjects. Unless I am misinformed, it is the rule of the Judiciary Committee, from which they almost never depart, to give no hearings at all, a course to which they are constrained by the necessities of the business committed to them. Therefore, entirely independent of any question of the right or propriety of extending suffrage to the women of this country, it seems to me eminently proper and fitting that this committee should be raised."

Mr. Vest: "If the Senator will permit me, I simply wish to state in reference to his argument as to the Territories that I have the honor to be a member of the Committee on Territories, and at the last session, I believe, or the session before, while the Senator from Arkansas (Mr. Garland) was the chairman of that committee, we heard most respectfully and patiently for two days, I think, the advocates of woman suffrage in the Territories of the United States, and that committee to-day is ready to hear those ladies upon that question at any time they choose to appear before it."

Mr. Hoar: "The Senator's suggestion does not cover the District of Columbia; it does not cover the jurisprudence of the national courts, the practice or the rights, wherever they extend. The Committee on Territories is not raised for the purpose of dealing with that class of questions, as this committee would be. Therefore, I say it seems to me entirely independent of the opinion of any Senator upon the question of the extension of suffrage to women, that the raising of this committee is a right and proper and expedient measure."

Mr. Vest: "The Senator from Massachusetts was pleased to say that the Committee on the Judiciary had so many important questions pending before it that the subject of woman suffrage should not be added to them. The Committee on Territories is open to any complaint or suggestion by the ladies who advocate woman suffrage, in regard to this subject in the Territories; and the Committee on Privileges and Elections, to which this subject should go most appropriately, as affecting the suffrage, has not now before it, as I am informed, one single bill, resolution, or proposition of any sort whatever. That committee is also open to inquiry upon this subject.

"But, Mr. President, out of all committees without business, and habitually without business, in this body, there is one that beyond any question could take jurisdiction of this matter and do it ample justice. I refer to that most respectable and antique institution, the Committee on Revolutionary Claims. For thirty years it has been without business. For thirty long years the placid surface of that parliamentary sea has been without one single ripple. If the Senator from Massachusetts desires a tribunal for calm judicial equilibrium and examination, a tribunal far from the 'madding crowd's ignoble strife,' a tribunal eminently respectable, dignified, and unique, why not send this question to the Committee on Revolutionary Claims? When I name the *personnel* of that committee it will be evident that any consideration on any subject touching the female sex would receive not only deliberate but immediate attention, for the second member upon that committee is my distinguished friend from Florida (Mr. Jones), and who can doubt that he would give his undivided attention to the subject? It is eminently proper that this subject should go to that committee because if there is any revolutionary claim in this country it is that of woman suffrage. It revolutionizes society; it revolutionizes religion; it revolutionizes the Constitution and laws; and it revolutionizes the opinions of those so old-fashioned among us as to believe that the legitimate and proper sphere of woman is the family circle as wife and mother and not as politician and voter—those of us who are proud to believe that—

'A woman's noblest station is retreat;  
Her fairest virtues fly from public sight;  
Domestic worth—that shuns too strong a light.'

"Before that Committee on Revolutionary Claims why could not this most revolutionary of all claims receive immediate and ample attention? More than that, as I said before, if there is any tribunal that could give undivided time and dignified attention, is it not this committee? If there is one peaceful haven of rest, never disturbed by any profane bill or resolution of any sort, it is the Committee on Revolutionary Claims. It is, in parliamentary life, described by that ecstatic verse in Watts's hymn:

'There shall I bathe my wearied soul  
In seas of endless rest,  
And not one wave of trouble roll  
Across my peaceful breast.'

"For thirty years there has been no excitement in that committee, and it needs to-day, in Western phrase, some 'stirring-up.' Sir, I insist upon it that in deference to this committee; in deference to the fact that it needs this sort of regimen and medicine, this whole subject should be so referred."

The President *pro tempore*: "The Senator from Missouri offers an amendment, that the subject be referred to the standing Committee on Revolutionary Claims. The question is on the amendment of the Senator from Missouri."

Mr. Farley called for the yeas and nays; and they were ordered and taken, as follows:

YEAS—Bayard, Beck, Brown, Butler, Camden, Coke, Fair, Farley, Garland, Gorman, Hampton, Harris, Jackson, Jonas, Maxey, Morgan, Saulsbury, Vance, Vest, Voorhees, Walker, Williams—22.

NAYS—Aldrich, Cameron of Pennsylvania, Cameron of Wisconsin, Conger, Davis of Illinois, Dawes, Edmunds, Frye, Hale, Harrison, Hawley, Hill of Colorado, Hoar, Johnston, Jones of Florida, Kellogg, Logan, McMill, McMillan, Miller of California, Mitchell, Morrill, Platt, Plumb, Ransom, Rollins, Saunders, Sawyer, Sherman, Teller, Windom—31.

ABSENT—Allison, Anthony, Blair, Call, Cockrell, Davis of West Virginia, Ferry, George, Groome, Grover, Hill of Georgia, Ingalls, Jones of Nevada, Lamar, Lapham, McPherson, Mahone, Miller of New York, Pendleton, Pugh, Sewell, Slater, Van Wyck—23.

So the motion was not agreed to.

The President *pro tempore*: "The question recurs on the adoption of the resolution. It is in order to move to refer the resolution to the Committee on the Judiciary, the Chair understands."

Mr. Bayard, of Delaware: "I make a motion that the resolution be sent to the Committee on the Judiciary.

"I would state that I voted with some regret and hesitancy upon the motion of the Senator from Missouri (Mr. Vest) to refer this matter to the Committee on Revolutionary Claims. My regret was owing to the fact that I do not wish even to seem to treat a subject of this character in a spirit of levity or to indicate the slightest disrespect, by such a reference, to those whose opinions upon this subject differ essentially from my own. I cast the vote because I considered it would be taking the subject virtually away from the consideration of Congress at its present session. I do, however, hold that there is no necessity for the creation of a special committee to attend to this subject. The Committee on the Judiciary has within the last few years, upon many occasions, attempted to deal with it. Since you, sir, and I have been members of that committee—"

Mr. Hoar: "I desire to ask the Senator, if he is willing, having been lately a member of the committee to which he refers, whether it is not the rule of that committee to allow no hearings to individual petitioners, a rule which



is departed from only in very rare and peculiar cases?"

Mr. Bayard: "I will reply to the honorable Senator that the occasion which arose to my mind and caused me to remember the action of that committee was the audience given by it to a very large delegation of woman suffragists, to wit, the representatives of a convention held in this city, who to the number, I think, of twenty-five, came into the committee-room of the Committee on the Judiciary, and were heard, as I remember, for more than one day, or certainly had more than one hearing, before that committee, of which you, sir, and I were members."

Mr. Hoar: "If the Senator will pardon me, however, he has not answered my question. I asked the Senator not whether on one particular occasion they gave a hearing on this subject, but whether it is not the rule of that committee, occasioned by the necessity of its business from which it departs only in very rare cases, not to give hearings?"

Mr. Bayard: "I can not answer whether a rule so defined as that suggested by the honorable Senator from Massachusetts exists in that committee. It is my impression, however, that cases are frequently, by order of that committee, argued before it. We have had very elaborate and able arguments upon subjects connected with the Pacific Railroads, I remember; and we have had arguments upon various subjects. It is constantly our pleasure to hear members of the Senate upon a variety of questions before that committee. It may be only a proof that women's rights are not unrecognized nor their influence unfelt when I state the fact that if there be such a rule as is suggested by the honorable Senator from Massachusetts of excluding persons from the audience of that committee, on the occasion of the application of the ladies a hearing was granted, and they came in force—not only force in numbers, but force in the character and intelligence of those who appeared before the committee. They were listened to with great respect, but their views were not concurred in by the committee as it was then composed.

"We were all entertained by the bright wit, the clever and, in my judgment, in many respects, the just sarcasm of our honorable friend from Missouri (Mr. Vest), but my habit is not to consider public measures in a jocular light; it is not to consider a question of this kind in a jocular light. Whatever may be the merits or demerits of this proposition, whatever may be the reasons for or against it, no man can doubt that it will strike at the very roots of the present organization of society, and that its consequences will be most profound and far-reaching should the advocates of the measure proposed prevail.

"Therefore it is that I think this subject should not be considered separately; it should not have a special committee—either of advocates or opponents arranged for its considera-

tion; but it should go where proposed amendments to the fundamental law of the land have always been sent for consideration—to that committee to which judicial questions, questions of a constitutional nature, have always in the history of this Government been committed. There is no need, there is no justice, there is no wisdom in attempting to separate the fate of this question, which affects society so profoundly and generally, from the other questions that affect society. It can not be made a specialty; it ought not to be. You can not tear this question from the great contests of human passions, affections, and interests which surround it, and treat it as a thing by itself. It has many sides from which it may be viewed, some that are not proper or fitting for this forum, and a discussion now in public. There are the claims of religion itself to be considered in connection with this case. Civil rights, social rights, political rights, religious rights, all are bound up in the consideration of a measure like this. In its consideration you can not safely attempt to segregate this question and leave it untouched and uninfluenced by all those other questions by which it is surrounded, and in the consideration of which it is bound to be connected and concerned."

Mr. Beck, of Kentucky: "I desire to say only in a word that the difficulty I have and the question I desire the Committee on the Judiciary to report upon is the effect of this question upon suffrage. By the fifteenth amendment to the Constitution of the United States there can be no discrimination made in regard to voting on account of race, color, or previous condition. Intelligence is properly regarded as one of the fundamental principles of fair suffrage. We have been compelled in the last ten years to allow all the colored men of the South to become voters. There is a mass of ignorance there to be absorbed that will take years and years of care in order to bring that class up to the standard of intelligent voters. The several States are addressing themselves to that task as earnestly as possible. Now it is proposed that all the women of the country shall vote; that all the colored women of the South, who are as much more ignorant than the colored men as it is possible to imagine, shall vote. Not one perhaps in a hundred of them can read or write. The colored men have had the advantages of communication with other men in a variety of forms. Many of them have considerable intelligence; but the colored women have not had equal chances. Take them from their wash-tubs and their household work, and they are absolutely ignorant of the new duties of voting citizens. The intelligent ladies of the North and the West and the South can not vote without extending that privilege to that class of ignorant colored people.

"I doubt whether any man will say that it is safe for the republic now, when we are go-

ing through the problem we are obliged to solve, to fling in this additional mass of ignorance upon the suffrage of the country. Why, sir, a rich corporation or a body of men of wealth could buy them up for fifty cents apiece, and they would vote without knowing what they were doing for the side that paid most. Yet we are asked to confer suffrage upon them, and to have a committee appointed as favorable to that view as is possible, so as to get a favorable report upon it!

"I want the Committee on the Judiciary to tell the Congress and the country whether they think it is good policy now to confer suffrage on all the colored women of the South, ignorant as they are known to be, and thus add to the ignorance that we are now struggling with, and whether the republic can be sustained upon such a basis as that."

Mr. Morgan, of Alabama: "Inasmuch as this measure, I understand, has been made a party measure by the decree of a caucus, I propose to make some little inquiry into the past legislation of the Congress of the United States under Republican rule in respect of the extension of the right of suffrage to certain classes of people in this country. I will take up first the Territories. A system has prevailed in the organization of the Territories, I believe, uniformly the same as that which obtained in the case of the organization of the Territory of Utah. Under the fifth section of the act organizing the Territory of Utah, which was passed in 1850, it is provided:

That every free white male inhabitant above the age of twenty-one years, who shall have been a resident of said Territory at the time of the passage of this act, shall be entitled to vote at the first election, and shall be eligible to any office within the said Territory; but the qualifications of voters and of holding office, at all subsequent elections, shall be such as shall be prescribed by the Legislative Assembly: *Provided*, That the right of suffrage and of holding office shall be exercised only by citizens of the United States, including those recognized as citizens by the treaty with the Republic of Mexico, concluded February 2, 1848.

"I believe that every Territorial government is modeled upon this system, so far as it concerns the right of suffrage. We have put it in the power of the Territorial Legislature, after the first vote has been cast under the laws of the United States organizing the Territory, to prescribe the qualifications of voters, and after the qualification has been regulated by the law of the Territory, the remaining power in Congress is only to repeal or modify such legislation. So, sir, we have put it in the power of these Territorial Legislatures to provide for female suffrage, and if they should undertake to establish the right of women to vote, in order to correct that if we think it needs correction, we should have to repeal the act or modify it. A Territorial Legislature has the absolute right of legislation under such circumstances, and we only have the right to repeal or modify what they may do.

"Let us look for a moment at the result of woman suffrage in some of the Territories. I have read to you the act of 1850, organizing the Territory of Utah. The Territorial Legislature has gone forward and conferred the right of suffrage upon the women of Utah Territory. The population of Utah Territory in the last decade has reached from 64,000, I believe, to about 150,000; I can not state the figures exactly. The Territorial Legislature of Utah conferred upon the females of that Territory the right of suffrage, and how have they exerted that right? Sir, I am ashamed to say it, but it is known to the world that the power of Mormonism and polygamy in Utah Territory is sustained by female suffrage. You can not get rid of those laws. Ninety per cent of the legislative power of Utah Territory is Mormon and polygamous. If female suffrage is to be incorporated into the laws of our country with a view to the amelioration of our morals or our political sentiments, we stand aghast at the spectacle of what has been wrought by its exercise in the Territory of Utah. There stands a power supporting the crime of polygamy through what they call a divine inspiration, or teaching from God, and all the power of the judges of the United States, and of the Congress of the United States, has been unavailing to break it down. Who have upheld it? Those who in the family circle represent one husband to fifteen women.

"We have now 10,000,000 voters in the United States, who represent 50,000,000 people. What is the attitude of an American voter in reference to the non-voting population? It is that of a representative. One man in our political policy represents five people in voting, whether in a local election or in the most important election to which his franchise extends. He stands in our system as a representative of five people and votes for them; and by necessity it must remain so, because every child and every woman can not vote, and there must be some line of demarcation which fixes the boundary of the franchise of voting. That boundary was wisely fixed with reference to the supposed condition of families and the necessities of families, so that when a child became twenty-one years of age, if he were a son, or, being the head of a family and twenty-one years of age and over, he could represent that family in casting a ballot; and it adds much to the dignity and the value of the position of the American citizen that in all the different departments in which he is allowed to exercise the power of the ballot he is attended with the responsibility of this representative character. We must not discard that.

"Where is the necessity of raising the number of voters in the United States from 10,000,000 to 20,000,000? That would be the direct effect of conferring suffrage upon the women, for they have at least one half, if not a little more than one half, of the entire population of



the country above the age of twenty-one. We have now masses of voters so enormous in numbers as that it seems to be almost beyond the power of the law to execute the purposes of the elective franchise with justice, with propriety, and without crime. How much would these difficulties and these intrinsic troubles be increased if we should raise the number of voters from ten to twenty million in the United States! That would be the direct and immediate effect of conferring the franchise upon the women. What would be the next effect of such an extension of the suffrage?

"Gentlemen come here into the Senate of the United States and make long speeches urging upon the States the necessity of securing a full, free, fair, and unbridged right on the part of negroes to vote everywhere, and scolding and vituperating the States in respect of their conduct, when they themselves, after having given to the negroes the right of suffrage in the District of Columbia, took it away because they could not stand it in their own persons and in reference to their own property. If there had not been a Republican in the United States who owned any property in the District of Columbia, the negroes to-day would have been voters in this District; but when it was found that negro suffrage was to control Republican property and Republican administration of local affairs in the District of Columbia, then with one broad swoop they dismissed the negro and the white man and the woman from all opportunities of exercising the power to vote. Let it not any more be thrown at us that we have denied any people the right of suffrage, that we have abridged or in any way restrained any persons in the exercise of this right, when the men who have had such immense majorities in both branches of Congress have absolutely sponged out the right of the white and the black both to vote, merely to get rid of negro suffrage."

The President *pro tempore*: "The question is on the adoption of the resolution."

The roll-call having been concluded, the result was announced, as follows:

YEAS—Aldrich, Allison, Anthony, Blair, Cameron of Pennsylvania, Cameron of Wisconsin, Conger, Davis of Illinois, Dawes, Edmunds, Ferry, Frye, Harrison, Hawley, Hill of Colorado, Hoar, Jones of Florida, Jones of Nevada, Kellogg, Lapham, Logan, McDill, McMillan, Miller of California, Mitchell, Morrill, Platt, Plumb, Ransom, Rollins, Saunders, Sawyer, Sewell, Sherman, Windom—35.

NAYS—Bayard, Beck, Brown, Butler, Camden, Cockrell, Coke, Davis of West Virginia, Fair, Farley, Garland, Hampton, Hill of Georgia, Jackson, Jonas, McPherson, Maxey, Saulsbury, Slater, Vance, Vest, Walker, Williams—23.

ABSENT—Call, George, Gorman, Groome, Grover, Hale, Harris, Ingalls, Johnston, Lamar, Mahone, Miller of New York, Morgan, Pendleton, Pugh, Teller, Van Wyck, Voorhees—18.

So the resolution was agreed to.

THE TARIFF COMMISSION.—In the House, on March 28th, the following bill was considered:

*Be it enacted, etc.*, That a commission is hereby created to be called the "tariff commission," to consist of nine members.

SECTION 2. That the President of the United States shall, by and with the advice and consent of the Senate, appoint nine commissioners from civil life, one of whom, the first named, shall be the president of the commission. The commissioners shall receive as compensation for their services each at the rate of ten dollars per day when engaged in active duty, and actual traveling and other necessary expenses. The commission shall have power to employ a stenographer and a messenger; and the foregoing compensation and expenses to be audited and paid by the Secretary of the Treasury out of any moneys in the Treasury not otherwise appropriated.

SEC. 3. That it shall be the duty of said commission to take into consideration and to thoroughly investigate all the various questions relating to the agricultural, commercial, mercantile, manufacturing, mining, and industrial interests of the United States, so far as the same may be necessary to the establishment of a judicious tariff, or a revision of the existing tariff, and the existing system of internal revenue laws, upon a scale of justice to all interests; and for the purpose of fully examining the matters which may come before it, said commission, in the prosecution of its inquiries, is empowered to visit such different portions and sections of the country as it may deem advisable.

SEC. 4. That the commission shall report to Congress the results of their investigation, and the testimony taken in the course of the same, from time to time, and make their final report not later than the first Monday in January, 1883.

Mr. Kasson, of Iowa: "Mr. Chairman, the bill presented for the consideration of the House is not new either to the House or to the country. It contains but few provisions, and they are easily comprehended, and may be simply stated.

"The theory, as I understand it, of its provisions is that this commission shall take up a given subject, for example the question of iron and its advanced products, proceed with this investigation, and so soon as the examination shall be rounded up and concluded, their report on that subject, and the facts ascertained by them, shall be immediately distributed for the consideration of Senators and members of the House. Then, another subject, wool and woolens, silks, agricultural products, and so on, so far as it shall be found necessary to consult the material interests of this country, and to consider their relations to each other. By another provision of the bill their report shall be submitted to Congress, the entire report, at the first meeting of Congress in December next, that action may be taken on it at that session. These are, simply stated, the provisions of the bill. The first question, I apprehend, that the members of this House would desire to be satisfied upon, is whether a revision of the present tariff is necessary; whether the present system, in its character, scope, and details, is or ought to be satisfactory to the country.

"This proposition, Mr. Chairman, needs but very little debate. I know of very few people in the United States who admit they have no complaint to make against some part of the details of the present tariff. Whether you are free-traders or prohibitory tariff men, protect-

ive tariff men, or advocates of a tariff for revenue only, I take it for granted that you all agree that in some manner the present tariff should be reviewed and more or less modified.

"For the last twenty years, subject to some slight partial modifications, this country has been conducting its business under the present tariff laws. As to its character and effect I shall speak later. At present I have only this to say, that the interests of the country have themselves become greatly modified, and in some respects radically changed, in the course of these twenty years. New industries have sprung up, and modifications of old industries have come into existence. New inventions have been applied in many arts, and thousands of new influences bearing upon the question of relative protection, upon the rates of duty required, upon the cost of production, and combination of materials, have arisen not only in America but in Europe. The conditions of competition between this country and Europe have consequently materially changed. This could not be helped. Changes are always occurring in progressive countries, not only in mechanical appliances but in the products of industry put upon the markets of the world.

"These changes are elements that always enter into a question of revision of any tariff system every few years in the progress of any nation; and every nation is obliged from time to time to revise its system of revenue, owing to the changed conditions which have come into existence, and have modified the character of the results obtained under the previous conditions. A striking proof of the necessity in our own legislation is found in the fact stated in the other House, that in four years eighteen hundred cases for the decision of the Secretary of the Treasury have been submitted to him arising under our present system. Many cases have been decided by the courts. All this shows the need of revision of law based on investigation of the actual present condition of our industries and securing greater precision.

"Gentlemen have often said to us: 'Oh, you do not mean anything by this tariff commission except delay; you do not want to touch the tariff or modify it at all; you have held this policy before us for one, two, or three years for no other purpose than to shield the manufacturers against a revision of the tariff.' Mr. Chairman, I take this occasion to say that this allegation does not come with the proper grace from our friends on the other side, who had it in their power in the last Congress to have allowed that bill to be taken from the Speaker's table and acted upon, as was desired by every member on this side of the House. Had that been done, then by January of this year a report would have been before you, a bill prepared, and your revision of the tariff would have been now in full progress.

"We have seen in the resistance offered today the same course pursued by our free-trade and revenue-tariff members against taking up

the question at all. I ask them to look the facts in the face, that this side of the House has been pressing the matter for consideration; that instead of using this proposition as a screen to prevent any action we have tried to hasten it; while for three Congresses our Democratic majority have utterly failed to give anything in the way of a revision in the ordinary form. It must therefore be evident that if we can do anything at all in this Congress it must be through this bill, and by the aid of a commission including neither Senators nor Representatives, but only men who can give their whole time to the subject, and who can visit the seats of our great industries."

Mr. Hewitt, of New York: "Mr. Chairman, I am opposed to the bill creating a tariff commission, for the reason that it will make delay, and delay is dangerous in the present perilous condition of general business. We are now prosperous, but our prosperity will continue only so long as there is an adequate market for our products. At present we have a foreign market chiefly for raw materials—such as food products, cotton, petroleum, and tobacco. For our manufactured products the markets of the world are practically closed against us—closed because it is impossible to sell our goods in the open markets of the world in competition with other manufacturing nations. The reason of this is, mainly, that our tariff legislation has erected artificial barriers to the free introduction of raw materials, and by the imposition of unwise taxes we are handicapped at the very outset in the commercial race. These obstructions can not be removed too soon. They are well known, and can be enumerated without difficulty. We tax food, of which we are the great exporters; we tax wool, which is the foundation of a vast industry; we tax bituminous coal, iron-ore, and scrap-iron, which lie at the base of the great iron and steel industry; we tax copper-ores, alcohol, and oils, and numerous chemicals, without which many branches of industry can not exist.

"Having thus created an artificial system, we find it impossible to compete with Great Britain and France and Germany, whose industry stands upon the firm and natural basis of free raw materials. This defect in our revenue system could be remedied by a joint resolution in one week, and the Committee on Ways and Means could then take as much time as might be needed to consider and adjust the infinite detail involved in the reconstruction of a tariff covering 2,500 articles. Unless a remedy be speedily applied, the industry of this country will be surfeited by the excess of products for which it can find no market. There is a limit to the amount of food which we can sell abroad, and it is a great mistake to suppose that Europe can not raise food in competition with America. The question is not, as many seem to suppose, so much the relative cost of production, as the amount of rent which can be collected from the farmer in Eu-



rope, in addition to the cost of production. It is therefore purely a question of rent. Foreign farms will not be abandoned, but the rents will be reduced and the products will be increased, so that, instead of larger, we are likely to have more restricted markets. The process of readjustment is now going on. Rents have been reduced from 20 to 30 per cent, and if that is not sufficient they will be further reduced until land is as free in Europe as it is upon this continent. Nations will not abandon the soil, but they will resist the imposition of rent and taxes which it will not bear.

"To any one studying the condition of this country at the present time three things are evident: first, that we are the most prosperous people in the world; and there I agree with the gentleman from Iowa; secondly, that we are paying the highest wages of any people in the world; and there again I agree with the gentleman from Iowa; lastly, that we have the highest tariff duties of any nation in the world; and there I think I agree with the gentleman from Iowa. But he reasons *post hoc propter hoc*: because we have a high tariff, therefore we are prosperous, and therefore we pay the highest wages of any nation in the world.

"But let me take him back to that era of depression between 1873 and 1879; and let us diagnose the condition of things then. We had then an era of depression in which men went to and fro in this land begging for employment. Then we had the lowest rate of wages that has prevailed in this country for the last forty years; and then we had the same high tariff that we have to-day. If I were to reason, as the gentleman did, *post hoc propter hoc*, I should say that the high tariff caused the bad times and the low wages and the want of work. But the truth is that the tariff has nothing to do with the matter. I will not say 'nothing to do'; it has an influence for evil, but it has no influence for good; it can not create good times; it can not create high wages; it can not give employment except in one single contingency, to which I shall recur hereafter; and in that contingency it was powerless from 1875 to 1878 inclusive.

"The only logical conclusion from these facts which can not be disputed is, that the depression then and the prosperity now, the low wages then and the high wages now, were not produced by the revenue system, in which no changes whatever have been made, but by causes which must be searched for elsewhere, and which must be understood before it will be possible for Congress to deal intelligently with the work of revenue reform, which public opinion requires it to undertake.

"Now, then, I take my first proposition, directly antagonizing the gentleman from Iowa. I assert that *legislation can not create value nor can it determine the rate of wages*. The issue is fairly made up. There is no source of

wealth in any country except that which is derived from the soil by the application of labor, machinery, and capital.

"It is not possible by any human contrivance, by any amount of abstract thought, by any schemes of legislation to add to the natural resources of any country. Whatever there may be, is in the soil and in the rain and sunshine that fructify it. Capital can only support the labor which is necessary to bring about the annual harvest, and machinery can only be used to economize the amount of labor bestowed. With labor and skill sufficient for the cultivation of the soil, the economy of production will be proportioned to the amount of capital and machinery employed in its cultivation. There is no royal road to wealth—there is no patent process by which the resources of nature can be augmented. 'Can a man by taking thought add a cubit to his stature?' In the absence of any legislation the work of production will proceed in a natural channel, and all that legislation can by any possibility do will be to divert labor and capital from the direction which they would have taken under natural laws. I feel it necessary to make this statement, because many persons who have not given much reflection to this subject seem to think that there is some potency in legislation which can add value to the forces of nature. This fallacy underlies a great many of the propositions which are made in regard to money as well as industry. It is the key to the fiat-money delusion, and it is the explanation of the mistake which is made by those who advocate protection for the sake of protection. When it is once realized that value can not be created by legislative action, and is the offspring only of hard and honest labor aided by actual capital—that is, by the possession of accumulated wealth either in the form of money, structures, materials, or machinery—most of the difficulties in the way of intelligent legislation and of placing our industry upon a secure basis will disappear.

"But if legislation can not create value, it can prevent the growth of wealth by misdirecting industry into unprofitable channels, and by depriving us of the profit which is realized when we exchange the products of our labor, properly applied, for commodities which can be produced in other countries with less expenditure of labor than is necessary to produce these commodities at home. In other words, the profits of legitimate commerce may be altogether or partially destroyed by artificial obstructions to the free natural interchange of commodities. These obstructions constitute a deduction from the amount which our producers would otherwise receive for their labor and skill, and are therefore to be avoided, and not created by the action of government.

"From this simple statement it will be apparent that I do not believe in the efficacy of taxation in any form as an aid to the development of industry. If we could dispense with

taxation altogether it must be evident that the producers of this country would have more to spend and the consumers would get more for the money which they have to expend. As I have already stated, the only possible effect of taxes imposed upon foreign commodities must be to alter the direction or distribution of human effort."

The Speaker: "The question is on the passage of the bill."

The question was taken, and it was decided in the affirmative, as follows:

YEAS—Aldrich, Anderson, Atherton, Barbour, Barr, Bayne, Bingham, Bliss, Bowman, Brewer, Briggs, Browne, Brumm, Buck, Julius C. Burrows, Joseph H. Burrows, Butterworth, Calkins, Camp, Campbell, Candler, Cannon, Carpenter, Chace, Chapman, Clardy, Crapo, Cullen, Curtin, Darrall, Dawes, Daering, De Motte, Dezendort, Dingley, Dwight, Ellis, Ermentrout, Errett, Charles B. Farwell, Ford, George, Gibson, Godshalk, Grout, Guenther, Hall, Harmer, Henry S. Harris, Haseltine, Haskell, Hawk, Hazelton, Heilman, Henderson, Hepburn, G. W. Hewitt, Hill, Hiscock, Hoblitzell, Hoge, Horr, Hubbell, Hubbs, Humphrey, Jacobs, Phineas Jones, Jorgensen, Joyce, Kasson, Kelley, Kenna, Ketcham, Klotz, Lacey, Lewis, Lord, Lynch, Marsh, McClure, McKinley, McLane, Miller, Moore, Morey, Moss, Mosgrove, Murch, Mutchler, Neal, Norcross, O'Neill, Pacheco, Page, Payson, Peelle, Peirce, Pound, Prescott, Randall, Ranney, Ray, Reed, Theron M. Rice, William W. Rice, Rich, Ritchie, George D. Robinson, James S. Robinson, Ross, Russell, Ryan, Seaville, Scranton, Shallenberger, Shelley, Sherwin, Shultz, Skinner, A. Herr Smith, J. Hyatt Smith, Spear, Spooner, Steele, Stone, Strait, Talbott, Taylor, Thomas, William G. Thompson, Amos Townsend, Tyler, J. T. Updegraff, Upson, Valentine, Van Horn, Van Voorhis, Wadsworth, Wait, Walker, Ward, Watson, Webber, White, Charles G. Williams, Wilits, Wilson, George D. Wise, Morgan R. Wise, Walter A. Wood, Young—151.

NAYS—Aiken, Armfield, Atkins, Beach, Belford, Belmont, Beltzhoover, Berry, Bland, Blount, Bragg, Buchanan, Buckner, Caldwell, Carlisle, Clark, Clements, Cobb, Colerick, Cook, Samuel S. Cox, William R. Cox, Cravens, Culberson, Cutts, Davidson, Lowndes H. Davis, Deuster, Dibble, Dowd, Dunn, Dunnell, Evans, Sewell S. Farwell, Finley, Forney, Garrison, Gunter, N. J. Hammond, Hardenbergh, Hatch, Herbert, Herndon, Abram S. Hewitt, House, James K. Jones, King, Knott, Latham, Leedom, Le Fevre, Manning, Matson, McCoid, McKenzie, McMillin, Mills, Money, Morrison, Moulton, Muldrow, Oates, Orth, Phister, Reagan, Scales, Shackelford, Otho R. Singleton, Springer, Stockslager, P. B. Thompson, Tillman, R. W. Townshend, Tucker, Oscar Turner, Thomas Updegraff, Vance, Warner, Washburn, Wellborn, Whitthorne, Thomas Williams, Willie—88.

Nor Voting—Black, Blackburn, Blanchard, Cabell, Cassidy, Caswell, Converse, Cornell, Covington, Crowley, George R. Davis, Dibrell, Dugro, Fisher, Flower, Frost, Fulkerson, Geddes, John Hammond, Hardy, Benjamin W. Harris, Holman, Hooker, Houk, Hutchins, Jadin, George W. Jones, Ladd, Lindsey, Martin, Mason, McCook, Miles, Nolan, Parker, Paul, Pettibone, Phelps, John B. Rice, D. P. Richardson, John S. Richardson, Robertson, Robeson, William E. Robinson, Roscrans, Simonton, James W. Singleton, Dietrich C. Smith, Sparks, Spaulding, Stephens, Henry G. Turner, Urner, Van Aernam, West, Wheeler, Benjamin Wood—57.

So the bill was passed.

The Senate, on May 9th, as in Committee of the Whole, proceeded to consider the bill (H. R. No. 2,315) to provide for the appointment

of a commission to investigate the question of the tariff.

Mr. Morrill, of Vermont: "This is identically the same bill as the Senate passed, with these words only omitted: 'and existing system of internal-revenue laws.' Those words are left out, as I understand, for the purpose of leaving the Committee on Ways and Means of the House at liberty to propose a bill that will modify the internal-revenue laws."

Mr. Davis, of West Virginia: "I understand that the commissioners are to be confirmed by the Senate."

Mr. Morrill: "Yes, sir."

Mr. Beck, of Kentucky: "I advised that there was no necessity for any further delay in regard to this bill by referring it to the Committee on Finance. I was not aware, however, of one fact that I learn this morning, that in March, 1879, shortly before the Eaton bill was presented, Mr. D. J. Morrell, of Pennsylvania, was made president of the American Iron and Steel Association; he was a member of the House of Representatives at the time when the Bessemer steel duty was raised to \$28 a ton, and on taking the chair he advised the association thus:

"Demand that the subject shall be intrusted to a commission not of owl-eyed college professors, but of business men and statesmen appointed by the President of the United States, with instructions and authority to ascertain the condition and wants of all our industries, and to examine the tariff legislation of this and other countries with reference to its influence upon national welfare, and demand also that Congress shall refrain from legislation upon the subject until the presentation of the report of this commission. If no other good results from this, we shall at least have what the country most needs, a little rest.

"They will get 'a little rest' now for a couple of years, and maintain the present condition of things; and they have succeeded so well in getting a continuance that I do not suppose it is worth while to delay it."

The bill was reported to the Senate without amendment, ordered to a third reading, and read the third time.

The President *pro tempore*: "Shall the bill pass?"

The result was announced as follows:

YEAS—Aldrich, Allison, Anthony, Blair, Cameron of Wisconsin, Conger, Davis of West Virginia, Dawes, Frye, Gorman, Groome, Hale, Hampton, Harrison, Hawley, Hill of Colorado, Hoar, Johnston, Jones of Nevada, Kellogg, Lapham, McDill, McMillan, McPherson, Mahone, Miller of California, Miller of New York, Mitchell, Morrill, Platt, Rollins, Sawyer, Sewell, Sherman, Windom—85.

NAYS—Call, Cockrell, Coke, Davis of Illinois, Farley, George, Grover, Harris, Ingalls, Jackson, Jonas, Maxey, Morgan, Pugh, Slater, Vance, Van Wyck, Vest, Walker—19.

ABSENT—Bayard, Beek, Brown, Butler, Camden, Cameron of Pennsylvania, Chilcott, Edmunds, Fair, Ferry, Garland, Hill of Georgia, Jones of Florida, Lamar, Logan, Pendleton, Plumb, Ransom, Saulsbury, Saunders, Voorhees, Williams—22.

So the bill was passed. (See TARIFF REVISION.)

APPORTIONMENT OF REPRESENTATIVES.—IN



the House, on February 7th, the bill to apportion Representatives was considered.

Mr. Prescott, of New York: "The system upon which this bill is based is best set out in the letter of its originator, Mr. C. W. Seaton, from which I request the Clerk to read."

The Clerk read as follows:

The present tables differ from those contained in your letter of January 17, 1881, addressed to Hon. S. S. Cox, chairman of the Committee on the Census, House of Representatives, in that they are based upon the population as now finally determined, and in that the calculations have been made upon assumptions as to the total number of Representatives ranging from 275 to 350, both inclusive, the range in the original tables having been from 293 to 325.

While making these calculations I met with the so-called "Alabama paradox," where Alabama was allotted 8 Representatives out of a total of 299, receiving but 7 when the total became 300.

Such a result as this is to me conclusive proof that the process employed in obtaining it is defective, and that it does not in fact "apportion Representatives among the several States according to their respective numbers."

This conclusion has been confirmed by the discovery of other anomalies, and the result of my study of this question is the strong conviction that an entirely different process should be employed.

That heretofore used is the following:

The total representative population of the country is divided by the proposed total number of Representatives. The quotient obtained is "the ratio of Representatives to population," or, in better phrase for our present purpose, it is the number of inhabitants which would fall to each congressional district, were it possible to divide the whole country into districts exactly equal in population. This number may, for convenience in the discussion, be termed the *modulus*.

This modulus is then applied as a divisor to the population of the several States. The entire quotient thus obtained for each State, after rejecting the fraction, is evidently the minimum number of Representatives which can be assigned to such State (except in the case of a State having a population less than the modulus, each State being entitled to at least one Representative).

Making a preliminary allotment of minimums in this manner, the sum of the numbers so allotted will be less than the number of Representatives originally taken.

The difference must now be made up by increasing the allotment to certain States. It will result from such assignment, of course, that the average number of inhabitants to each Representative in the State to which additional Representatives are allotted will be less than the modulus, and that one or more of the districts formed in such State shall have less than their full quota. It is the mode of determining to which of the States the additional Representatives shall be assigned which I believe to be erroneous, and it is at this point that the variance between the process heretofore employed and the one which I now propose begins. (For the sake of convenience the two processes will hereafter be characterized respectively as the old and the new method.)

The old method compares the remainders left after the divisions above described, and assigns an additional Representative, first, to that State where the remainder after division was greatest; next, to the State where the remainder was next in size; and so on in order of rank of the remainders until the difference is made up. It is my opinion that it is not these remainders but rather the quotients which result from dividing the populations of the States by the increased number of Representatives which should govern the allotment, and that the additional Representatives

should be so assigned that the population of the districts formed in the State to which additional Representatives are allotted shall fall as little below the average number for the United States as possible; in other words, that the districts ultimately formed from the States so increased shall approximate as closely as possible in population to that of a district which should be formed by dividing the total population of the United States exactly by the proposed total number of Representatives. If it were true that districts each containing a population exactly equal to the ratio of Representatives to population for the United States must first be carved out of each State, and that enough districts to fill the quota were afterward to be made from the fragments left, then the old method of allotment would no doubt be the proper one. In that case the largest remaining fragments would necessarily receive the additional Representatives. But the practice and, so far as I know, the law has uniformly aimed to divide the States finally, after the number of Representatives for each State has been determined, in such manner that in each State the districts shall be as nearly equal to each other in population as possible.

Having, therefore, as before, made the preliminary allotment of minimums and ascertained the number of Representatives which must still be assigned, I would then determine, by trial, under what additional distribution the number of inhabitants per Representative in the States whose representation is increased would fall least below the ratio, and distribute accordingly.

Mr. Prescott: "Doubtless each member has carefully studied the explanation and tables, and I will spend no time in explanation further of same. The committee after careful consideration adopted this method, because they believed it embodied the intent and design of the Constitution, and apportioned the members among the several States according to their respective numbers.

"At 320, the number provided in this bill, Maine, New Hampshire, and Vermont lose 1 under any form of division; but as between the former method and the Seaton method, California, Florida, and Rhode Island each gain 1 by the old method which by the Seaton method they lose, and Illinois, New York, and Pennsylvania gain the same. In other words, Florida by the old method will have 134,746 to a member, Rhode Island 138,265 to a member, and California 144,115 to a member, in preference to giving these to the other three States, which would then have—Illinois, 146,565; Pennsylvania, 147,685; and New York, 149,496.

"By the old method you give it to the largest fraction, by the Seaton method you obtain equality of representation as nearly as is possible. As between the methods there is no dispute or uncertainty, but one question presented is whether New York with her 5,082,871 inhabitants, with an assessed valuation of property subject to taxation of \$2,686,139,133, whose citizens hold \$210,264,250 of the nation's bonds, or about one third of all held by citizens of the United States, being nineteen times as many as are held in California, fifty-two times as many as are held in Rhode Island, eight hundred and thirty-one times as many as in Florida; who represent one fifth of the



bank capital of the country, and have and use one quarter of its entire circulation; whose citizens hold nearly three fourths of the whole gold certificates of the Government, and within whose State limits were collected in 1881 \$141,958,855.90 of the customs, or nearly three fourths of all in the country; whose banks paid the Government \$2,042,838 in taxes, or one fourth of all paid; the citizens of which pay \$17,233,393.75, or one eighth of the internal revenue of the Treasury, shall by a just apportionment, according to numbers, because of the largest ratio of apportionment, receive an increase of one thirty-third of her representation, or shall California receive an increase of one fifth, Florida of one half, or Rhode Island one half, as you shall give to one of them the Representative taken from New York.

"Rhode Island, with only 276,531; Florida, with only 269,493; and California, with 864,694, are each the equal of New York now in the Senate, and will continue to be, although her 5,082,871 should become 10,000,000. In one branch of the Government they stand her equal in legislative power, and, while their combined population is but a fraction of hers, their voice is three times as potential.

"Am I met with the claim that wealth, the sinew for the support of the Government and her bulwark of defense, counts nothing in representation?

"That such was not the design of the founders of the Constitution, is self-evident. Taxation and representation they considered joint factors in their blows for freedom. They reiterated it in the original wording of the Constitution:

"Representation and direct taxes shall be apportioned among the several States . . . according to their respective numbers.

"But they went further, when they added:

"Which shall be determined by adding to the whole number of free persons, including those bound to service for a term of years, and excluding Indians not taxed, three fifths of all other persons.

"This added three fifths of the described personal property of the States to make up the representative population of the States. This property in 1790 had 12 Representatives; in 1800, 16; in 1810, 20; in 1820, 22; in 1830, 25; in 1840, 21; in 1850, 20; in 1860, 18, and it may be her material wealth and position in the Union in 1790 gave Massachusetts her extra 3, in 1800 her extra 5, in 1810 her extra 7 and New York her 2, in 1820 Alabama and Virginia their 1 additional. Be that as it may, this is not a new claim. In 1791 Mr. Barnwell asserted that extent of territory should be regarded in apportionment. Mr. Giles in 1792 contended 'that a full and large representation was necessary to give the landed interest of the country its proportion of power,' and Mr. Quincy in 1810 asserted that apportionment 'ought to be made, not merely in relation to population, but the weight of the different States in the

Union.' The same will be found in each decade of later date, and forms a reason why the Representatives of other States upon this floor should act equitably and deal justly with New York, which, though originally the fifth State of this Union, stands to-day, as she has since 1820, the first in the galaxy of States."

Mr. Robinson, of Massachusetts: "I shall address myself to one particular feature of this bill, because the question of the total number of the House will be discussed by other gentlemen at length. I wish to speak of the distribution.

"It will be noticed on examination, as has been stated by my friend from New York, that the only States that are affected in that distribution by the choice of the old method or the new method are six. Take the table that is given to us by Mr. Seaton, of the Census Office, under the number 320 you will find the column that gives the numbers to the different States under the old method first and then under the new. Following down this column of figures you will observe, for the figures catch the eye readily, that no States are affected differently from what they were under the former computation, except Florida, Rhode Island, California, Pennsylvania, New York, and Illinois.

"Now, if the number fixed in this bill, 320, is right—and as to the discussion of methods we will take it that it is—starting with that number as your basis, how will you apportion it? Shall we take the old way, or shall we take the new? Certainly let us take the new if it is better, if it is more just and equitable; but let us scan it very closely before we do adopt it and discard the old method, which has been heretofore considered just and equitable.

"Now, in the last Congress when the bill for 319 members was introduced—and the total number is not a matter of consequence in this immediate connection—the apportionment was made on the old method; and I find that the gentleman from New York (Mr. Cox), who was at that time the chairman of the Committee on the Census, said after assigning the number of Representatives, that is, taking out the even numbers in the first place from the total numbers and assigning them to the States, then he would assign the balance according to the old method, and said:

"The difference according to the best and most equitable recent practice should be made up by assigning to the States having the largest fractions additional Representatives.

"Now, on that basis of operation let us see how we will manage. In the first place, we take the entire number of members; say 320 is the number fixed upon. The population of the United States, leaving out those that should be excluded, foots up 49,371,200. Dividing that population by the number of Representatives fixed in the bill, and you will have a quotient of 154,285 to each Representative. That is the precise number. Now, you are to take that number, 154,285, and go around with it



and measure up the population of the States. That is what the Constitution says—that Representatives shall be apportioned among the several States according to their respective numbers; and you take that, as I say, and measure the population of each State by it. You go, for instance, into the State of Georgia, and you find that you have a certain number as the Representatives to be assigned to that State; but after that you have a fraction. Going around to all the States in the same way, and assigning Representatives on even numbers according to this division, and you will find that your footings up will not reach 320, for in all of the States there will be a remainder after the first division. Now, how will you supply that remainder?

"The old method was to take the fractions next in order approaching nearest to the number of population required, and assign the remaining members to those fractions. Now, we thought that to be right. There was no objection to that rule. The people of the country have assented to it as just and proper. Even in the last Congress, when the communication from the Census Office came in and laid down that principle as the method of operating, nobody got up in the House and let out this great flood of new light and suggested this new order of things with which we are met to-day. That was regarded as a proper principle. No objection was made to it, and nobody ever heard of this new plan before.

"Now, Mr. Speaker, how is it that the new method proposes to get at the number of members? What is the result? I submit to the Speaker and to the House that it is always a fair test of any question to stop and look back at your result after you get there; for somehow or other there comes a conviction if your result, when your attention is called to it, does not look right, that there must be something wrong in the argument, something the matter with the process.

"Now, when you take up this table, as presented by the committee and advocated by the gentleman from New York, what do you find? When you find that Florida, Rhode Island, and California are to give up one Representative each, you begin to grow a little doubtful as to whether your process is right or not; but when you learn in addition to that that they are not only to surrender it themselves but that they are to lay it down in the laps of Illinois, Pennsylvania, and New York, then I am pretty well convinced that it is wrong. Now, is it not wrong? The great States of this Union are able to take care of themselves on this floor."

Mr. Briggs, of New Hampshire: "They are trying to do it in this bill."

Mr. Robinson: "My friend from New Hampshire says they are trying to do it. No, sir. There are gentlemen in those great States, I believe, who will not support this claim and will not gather power to themselves or to their

States on this floor by sacrificing the weaker. Gentlemen whose States are not affected directly by this computation will not stand tamely by and let this go unheeded. Massachusetts has no interest directly whether the apportionment be under the one method or the other, but she is interested with the other States—not in her section, for the sections are divided in the extreme; no places could be more remote than California, Florida, and Rhode Island in this great Union—she is interested, I say, that those other States shall be justly dealt with.

"What is proposed here? The gentleman recommending this method speaks of the Alabama paradox; and because under a certain method of figuring there seemed to be something that surprised one, that is an argument for abandoning the old scheme. Now, there will be found to be paradoxes in the new scheme."

Mr. Bayne, of Pennsylvania: "I defy the gentleman to point out one."

Mr. Robinson: "I accept the gentleman's defiance right here, because it is a peaceable defiance. What is the plan? It is to take those numbers of the population of the great States and so divide them up, it is said, that the numbers shall be as near as possible all over the country to the maximum number, 154,285.

"Let us see what the gentleman says who is the parent of the scheme. After commenting upon the old method, he says—I read from the communication of Mr. C. W. Seaton, chief clerk of the Census Office:

"It is my opinion that it is not these remainders, but rather the quotients which result from dividing the populations of the States by the increased number of Representatives, which should govern the allotment, and that the additional Representatives should be so assigned that the population of the districts formed in the State to which additional Representatives are allotted shall fall as little below the average number for the United States as possible; in other words, that the districts ultimately formed from the States so increased shall approximate as closely as possible in population to that of a district which should be formed by dividing the total population of the United States exactly by the proposed total number of Representatives.

"Unless this is in some other language than the English, I have stated it right. But let us look at some of the results. We want paradoxes, it seems.

"Now, I have some figures here just as they are given under the old method. With six Representatives for California each would stand for 144,615 persons. In Florida, with her two Representatives, each would stand for 134,746. In Rhode Island, with her two Representatives, each would stand for 138,265. In New York, with thirty-three Representatives, each would stand for 154,026. In Pennsylvania, with twenty-eight Representatives, each would stand for 152,960. In Illinois, with twenty Representatives, each would stand for 153,893. That is under the old method. Now, Mr. Speaker,

it is apparent that those numbers are pretty nearly alike, while varying somewhat.

"I will now go over to the new method and see how it will bear the same comparison. In California, with five Representatives, each must stand for 172,938. In Florida, with one Representative, that one Representative must stand for 269,493 persons. Paradox No. 1! In Rhode Island, with her one Representative, that one man must stand for 276,531 persons. Paradox No. 2! In New York, with thirty-four Representatives, each one will stand for 149,496. In Pennsylvania, each will stand for 147,685, and in Illinois each will stand for 146,565.

"Now, at first blush, does anybody think that is right? Is that a fair representation of the people of the United States? I know they raise able and brilliant men in Rhode Island. I do not believe they raise any one quite smart enough to overlie that whole State and have superfluous energy enough to represent 276,531 people on the scale of 154,285. The comparison shows that Pennsylvania and New York are not quite up to that standard, and they want more men.

"There is another statement. Under the old method the California members would each represent 9,670 people less than the full number. The Florida members would each represent 19,869 less than the full number. The Rhode Island members would each represent 16,020 less than the full number. The New York members would each represent 159 less than the full number. The Pennsylvania members would each represent 1,325 less than the full number. The Illinois members would each represent 392 less than the full number.

"Now go to the new method. California: each man would represent 18,653 more than the full number. Florida: its member would represent 105,208 more than the full number. Rhode Island: its member would represent 122,246 more than the full number. Now look at the other three States. New York: each member would represent 4,789 less than the full number. Pennsylvania: each member would represent 6,600 less than the full number. And Illinois: each member would represent 7,720 less than the full number."

Mr. Calkins, of Indiana: "That is, in each district?"

Mr. Robinson: "I am speaking of the number for each Representative. Is that equality of representation? Do you want any more paradoxes?"

"I suppose it is not seriously claimed, Mr. Speaker, in this House, that the wealth of any State shall ultimately determine the ratio of representation. Much may be pardoned to the gentleman from New York, of course, for his pride in his State. We all have the same pride in our respective States. We find something very dear to us in the people we represent upon this floor. That is all right. It is right

for us to have that pride and deep sense of honor. But, after all, when the fathers wrote in the Constitution that the Representatives should be apportioned among the several States according to their respective numbers, they did not make it within the power of this Congress thereafter to prescribe the qualification of wealth, nor that the members who sit here should be able to make their qualifications secure by presenting the roll of their bonds or of the acres of their lands. I have proposed an amendment to the bill to strike out the first section and to replace it with a new first section, making the number 320, because, as I said, I did not propose to discuss that question of the total number. What I may choose to vote by-and-by, in regard to the whole number of the House, is not of importance in my present consideration. But I ought to say, perhaps, that as little increase as practicable from the present number I believe to be wise.

"Of course we have given a great deal of consideration in this hall during the last Congress to this subject. We find that taking different parts of the country, and making the allotments to the several States, the number 319 would be practically fair and equal. But 320 differs from that so little that it does not seem to me that we would make much by any long discussion as to what should be the total number. I want to say that I have not only recognized that full number in the amendment which I have offered, but I have made the amendment to correspond to the line of my argument.

"That is, I have said to Pennsylvania, New York, and Illinois, you are entitled to one less each under this old scheme; and to the States of Florida, Rhode Island, and California, you ought to have one more. In other words, I say that the new method proposed is so wretchedly and palpably at fault, is so unjust to the three States last named by me, and does more than justice to the three States first named, that we ought not adopt it, but should rather retain the old one."

Mr. Mills, of Texas: "Mr. Speaker, the primal, central object of the provision in the Constitution requiring a census of the population of the States to be taken every ten years was to afford a basis for the distribution of political power. This is a representative government, and our fathers in forming this government were careful to provide for a correct representation of its people. They have laid down a defined method of representation in this House; and that political power which is the safeguard of their liberties and the safeguard of the liberties and rights of their children they have said shall be distributed among the people of the States in proportion to their numbers."

The Speaker: "The next amendment in order is that offered by the gentleman from Kansas (Mr. Anderson), which will be read."

The Clerk read as follows:



Strike out all of section 1, after the enacting clause, and insert these words:

"That after the 3d of March, 1883, the House of Representatives shall be composed of 325 members, to be apportioned among the several States as follows: Alabama, 8; Arkansas, 5; California, 6; Colorado, 1; Connecticut, 4; Delaware, 1; Florida, 2; Georgia, 10; Illinois, 20; Indiana, 13; Iowa, 11; Kansas, 7; Kentucky, 11; Louisiana, 6; Maine, 4; Maryland, 6; Massachusetts, 12; Michigan, 11; Minnesota, 5; Mississippi, 7; Missouri, 14; Nebraska, 3; Nevada, 1; New Hampshire, 2; New Jersey, 7; New York, 34; North Carolina, 9; Ohio, 21; Oregon, 1; Pennsylvania, 28; Rhode Island, 2; South Carolina, 7; Tennessee, 10; Texas, 11; Vermont, 2; Virginia, 10; West Virginia, 4; Wisconsin, 9."

The Speaker: "The question is on the amendment offered by the gentleman from Kansas (Mr. Anderson), which has just been read."

Mr. Sherwin, of Illinois: "Some members do not understand how many members are proposed in that amendment."

The Speaker: "Three hundred and twenty-five."

Mr. Thompson, of Kentucky: "I rise to a parliamentary inquiry. I wish to know whether these three hundred and twenty-five members are by this amendment apportioned according to the new or the old method."

Mr. Prescott: "The old method."

The question was taken; and it was decided in the affirmative, as follows:

YEAS—Aiken, Aldrich, Anderson, Barr, Bayne, Beach, Beltzhoover, Bingham, Bowman, Bragg, Brewer, Briggs, Browne, Brumm, Buck, Julius C. Burrows, Joseph H. Burrows, Butterworth, Calkins, Campbell, Candler, Cannon, Carpenter, Caswell, Chace, Crapo, Crowley, Culberson, Cullen, Davidson, George R. Davis, Dawes, Deering, De Motte, Deuster, Dezen-dorf, Dingley, Dunnell, Ellis, Errett, Evins, Sewell S. Farwell, Finley, Ford, Fulkerson, George, Godshalk, Grout, Guenther, Hall, John Hammond, Harner, Benjamin W. Harris, Haseltine, Haskell, Hawk, Hazelton, Heilman, Henderson, Hepburn, Hill, Hiscok, Hoblitzell, Horr, Houk, Hubbell, Hubbs, Humphrey, Jacobs, Jadwin, George W. Jones, Phineas Jones, Joyce, Kasson, Kelley, Lacey, Lewis, Lindsey, Lord, Marsh, Mason, McClure, McCoid, McCook, McKinley, McLane, Miles, Miller, Mills, Moore, Morey, Neal, Norcross, O'Neill, Orth, Pacheco, Page, Parker, Paul, Payson, Peelle, Pierce, Pettibone, Pound, Prescott, Ranney, Ray, Reagan, Reed, John B. Rice, Theron M. Rice, William W. Rice, Rich, D. P. Richardson, John S. Richardson, Ritchie, Robertson, Robeson, George D. Robinson, James S. Robinson, Russell, Ryan, Scranton, Shallenberger, Shelley, Sherwin, Shultz, Skinner, A. Herr Smith, Dietrich C. Smith, Spaulding, Speer, Spooner, Steele, Stone, Strait, Taylor, Thomas, William G. Thompson, Tillman, Amos Townsend, Tyler, J. T. Updegraff, Thomas Updegraff, Upson, Urner, Valentine, Van Aernam, Van Horn, Wadsworth, Wait, Walker, Ward, Washburn, Watson, Webber, Wellborn, West, Charles G. Williams, Willits, Walter A. Wood, Young—163.

NAYS—Armfield, Atkins, Barbour, Belmont, Berry, Black, Blackburn, Blanchard, Bland, Bliss, Blount, Buchanan, Buckner, Cabell, Caldwell, Carlisle, Cassidy, Chalmers, Chapman, Clardy, Clark, Clements, Cobb, Colerick, Converse, Cook, Samuel S. Cox, William R. Cox, Covington, Cravens, Curtin, Darrell, Lowndes H. Davis, Dibrell, Dowd, Dugro, Flower, Forney, Garrison, Geddes, Gunter, N. J. Hammond, Hardenbergh, Hardy, Henry S. Harris, Hatch, Herbert, Abram S. Hewitt, G. W. Hewitt, Goe, Holman, Hooker, House, Hutchins, James K. Jones, Kenna,

King, Klotz, Knott, Ladd, Latham, Leedom, Le Fevre, Manning, Martin, Matson, McKenzie, McMillin, Morrison, Mosgrove, Moulton, Muldrow, Murch, Mutchler, Oates, Phelps, Phister, Randall, William E. Robinson, Rosecrans, Scales, Seville, Shackelford, Simon-ton, James W. Singleton, Otho R. Singleton, Sparks, Springer, Stockslager, Talbot, P. B. Thompson, Tucker, Henry G. Turner, Oscar Turner, Vance, Warner, Wheeler, White, Whitthorne, Thomas Williams, Willis, Wilson, George D. Wise, Morgan R. Wise—104.

NOT VOTING—Allen, Atherton, Belford, Camp, Cornell, Cutts, Dibble, Dunn, Dwight, Ermentrout, Charles B. Farwell, Fisher, Frost, Gibson, Herndon, Jorgensen, Ketcham, Money, Morse, Nolan, Ross, J. Hyatt Smith, Stephens, R. W. Townsend, Van Voorhis, Benjamin Wood—26.

So the amendment was agreed to, and the bill passed in that form.

In the Senate, on February 21st, the bill was passed without amendment.

The bill as passed, was as follows:

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That after the third of March, eighteen hundred and eighty-three, the House of Representatives shall be composed of three hundred and twenty-five members, to be apportioned among the several States as follows: Alabama, 8; Arkansas, 5; California, 6; Colorado, 1; Connecticut, 4; Delaware, 1; Florida, 2; Georgia, 10; Illinois, 20; Indiana, 13; Iowa, 11; Kansas, 7; Kentucky, 11; Louisiana, 6; Maine, 4; Maryland, 6; Massachusetts, 12; Michigan, 11; Minnesota, 5; Mississippi, 7; Missouri, 14; Nebraska, 3; Nevada, 1; New Hampshire, 2; New Jersey, 7; New York, 34; North Carolina, 9; Ohio, 21; Oregon, 1; Pennsylvania, 28; Rhode Island, 2; South Carolina, 7; Tennessee, 10; Texas, 11; Vermont, 2; Virginia, 10; West Virginia, 4; Wisconsin, 9.

SECTION 2. That whenever a new State is admitted to the Union the Representative or Representatives assigned to it shall be in addition to the number three hundred and twenty-five.

SEC. 3. That in each State entitled under this apportionment the number to which such State may be entitled in the Forty-eighth and each subsequent Congress shall be elected by districts composed of contiguous territory, and containing as nearly as practicable an equal number of inhabitants, and equal in number to the Representatives to which such State may be entitled in Congress, no one district electing more than one Representative: *Provided*, That unless the Legislature of such State shall otherwise provide before the election of such Representatives shall take place as provided by law, where no change shall be hereby made in the representation of a State, the Representatives thereof to the Forty-eighth Congress shall be elected therein as now provided by law. If the number as hereby provided for shall be larger than it was before this change, then the additional Representative or Representatives allowed to said State under this apportionment may be elected by the State at large, and the other Representatives to which the State is entitled by the districts as now prescribed by law in said State; and if the number hereby provided for shall in any State be less than it was before the change hereby made, then the whole number to such State hereby provided for shall be elected at large, unless the Legislatures of said States have provided or shall otherwise provide before the time fixed by law for the next election of Representatives therein.

All acts and parts of acts inconsistent herewith are hereby repealed.

PRESIDENTIAL ELECTORS.—Article II of the Constitution of the United States declares: "Each State shall appoint, in such manner as



the Legislature thereof may direct, a number of electors equal to the whole number of Senators and Representatives to which the State may be entitled in Congress," etc. The number of presidential electors under the above-mentioned apportionment of Representatives is as follows:

Alabama, 10; Arkansas, 7; California, 8; Colorado, 3; Connecticut, 6; Delaware, 3; Florida, 4; Georgia, 12; Illinois, 22; Indiana, 15; Iowa, 13; Kansas, 9; Kentucky, 13; Louisiana, 8; Maine, 6; Maryland, 8; Massachusetts, 14; Michigan, 13; Minnesota, 7; Mississippi, 9; Missouri, 16; Nebraska, 5; Nevada, 3; New Hampshire, 4; New Jersey, 9; New York, 36; North Carolina, 11; Ohio, 23; Oregon, 3; Pennsylvania, 30; Rhode Island, 4; South Carolina, 9; Tennessee, 12; Texas, 13; Vermont, 4; Virginia, 12; West Virginia, 6; Wisconsin, 11. Total, 401.

**RIVER AND HARBOR BILL.**—In the House, the bill making appropriations for the construction, repair, and preservation of certain works on rivers and harbors, and for other purposes, was passed on July 26th, by the adoption of the final report of the committee of conference with the Senate committee.

On August 1st, President Arthur returned it to the House, with the following objections:

*To the House of Representatives:*

Having watched with much interest the progress of House bill No. 8,242, entitled "An act making appropriations for the construction, repair, and preservation of certain works on rivers and harbors, and for other purposes," and having since it was received carefully examined it, after mature consideration I am constrained to return it herewith to the House of Representatives in which it originated, without my signature and with my objections to its passage.

Many of the appropriations in the bill are clearly for the general welfare and most beneficial in their character. Two of the objects for which provision is made were by me considered so important that I felt it my duty to direct to them the attention of Congress. In my annual message in December last, I urged the vital importance of legislation for the reclamation of the marshes and for the establishment of the harbor lines along the Potomac front. In April last by special message I recommended an appropriation for the improvement of the Mississippi River. It is not necessary that I say that when my signature would make the bill appropriating for these and other valuable national objects a law, it is with great reluctance and only under a sense of duty that I withhold it.

My principal objection to the bill is that it contains appropriations for purposes not for the common defense or general welfare, and which do not promote commerce among the States. These provisions, on the contrary, are entirely for the benefit of the particular localities in which it is proposed to make the improvements. I regard such appropriation of the public money as beyond the powers given by the Constitution to Congress and the President.

I feel the more bound to withhold my signature from the bill because of the peculiar evils which manifestly result from this infraction of the Constitution. Appropriations of this nature, to be devoted purely to local objects, tend to an increase in number and in amount. As the citizens of one State find that money, to raise which they in common with the whole country are taxed, is to be expended for local improvements in another State, they demand similar benefits for themselves, and it is not unnatural that they should seek to indemnify themselves for such use of the public funds by securing appropriations for similar improvements in their own neighborhood. Thus as the bill becomes more objectionable it se-

cures more support. This result is invariable, and necessarily follows a neglect to observe the constitutional limitations imposed upon the law-making power.

The appropriations for river and harbor improvements have, under the influence to which I have alluded, increased year by year out of proportion to the progress of the country, great as that has been. In 1870 the aggregate appropriation was \$3,975,900; in 1875, \$6,648,517.50; in 1880, \$8,976,500; and in 1881, \$11,451,000, while by the present act there is appropriated \$18,743,875.

While feeling every disposition to leave to the Legislature the responsibility of determining what amount should be appropriated for the purposes of the bill, so long as the appropriations are confined to objects indicated by the grant of power, I can not escape the conclusion that, as a part of the law-making power of the Government, the duty devolves upon me to withhold my signature from a bill containing appropriations which in my opinion greatly exceed in amount the needs of the country for the present fiscal year. It being the usage to provide money for these purposes by annual appropriation bills, the President is in effect directed to expend so large an amount of money within so brief a period that the expenditure can not be made economically and advantageously.

The extravagant expenditure of public money is an evil not to be measured by the value of that money to the people who are taxed for it. They sustain a greater injury in the demoralizing effect produced upon those who are intrusted with official duty through all the ramifications of Government.

These objections could be removed and every constitutional purpose readily attained should Congress enact that one half only of the aggregate amount provided for in the bill be appropriated for expenditure during the fiscal year, and that the sum so appropriated be expended only for such objects named in the bill as the Secretary of War, under the direction of the President, shall determine; provided that in no case shall the expenditure for any one purpose exceed the sum now designated by the bill for that purpose.

I feel authorized to make this suggestion because of the duty imposed upon the President by the Constitution "to recommend to the consideration of Congress such measures as he shall judge necessary and expedient"; and because it is my earnest desire that the public works which are in progress shall suffer no injury. Congress will also convene again in four months, when this whole subject will be open for their consideration.

CHESTER A. ARTHUR.

EXECUTIVE MANSION, August 1, 1882.

In the House, on August 2d, Mr. Page, of California, from the Committee on Commerce, moved to take up the bill with the President's veto message. This was taken up, and on the question of its passage the vote was as follows:

YEAS—Atkins, Barbour, Bayne, Bingham, Blackburn, Blanchard, Bliss, Bowman, Brewer, Buck, Buckner, Julius C. Burrows, Butterworth, Cabell, Calkins, Candler, Cannon, Carpenter, Chapman, Clements, Crapo, Cravens, Culberson, Cullen, George R. Davis, Dawes, De Motte, Deuster, Dibrell, Dunn, Dunnell, Ellis, Errett, Evins, Sewell S. Farwell, Ford, Forney, Fulkerson, Garrison, George, Gibson, Guenther, Gunter, John Hammond, Harmer, Benjamin W. Harris, Henry S. Harris, Haseltine, Hatch, Hazelton, Henderson, Hepburn, Herndon, Hoblitzell, Hoge, Horr, House, Hubbell, George W. Jones, James K. Jones, Kenna, King, Latham, Lewis, Lord, Lynch, Mackey, Manning, McClure, McCoid, McLane, McMillin, Mills, Oates, O'Neill, Page, Parker, Payson, Pierce, Phelps, Pound, Reagan, John



B. Rice, Theron M. Rice, William W. Rice, Rich, D. P. Richardson, Ritchie, Robertson, Robeson, Roscrans, Ross, Shallenberger, Sherwin, Simonton, Otho R. Singleton, Smalls, Spaulding, Speer, Spooner, Stephens, Stone, Strait, Talbot, Taylor, Amos Townsend, Tucker, Upson, Urner, Vance, Van Aernam, Van Horn, Wait, Ward, Washburn, Weber, Wellborn, White, Charles G. Williams, Thomas Williams, Wilson, George D. Wise—122.

NAYS — Anderson, Belmont, Blount, Briggs, Browne, Brumm, Buchanan, Caldwell, Campbell, Colerick, Converse, Samuel S. Cox, Deering, Dingley, Ermentrout, Fisher, Godshalk, N. J. Hammond, Hardy, Haskell, Abram S. Hewitt, Hill, Hiscock, Holman, Hutchins, Jacobs, Jadwin, Kasson, Ketcham, Klotz, Leedom, Le Fevre, McKinley, Miller, Mutchler, Norcross, Peelle, Randall, Ray, Reed, George D. Robinson, James S. Robinson, William E. Robinson, Ryan, Scales, A. Herr Smith, Springer, Stockslager, E. W. Townsend, Henry G. Turner, Oscar Turner, Tyler, J. T. Updegraff, Thomas Updegraff, Warner, Whitthorne, Willis, Willits, Young—59.

NOT VOTING — Aiken, Aldrich, Armfield, Atherton, Barr, Beach, Belford, Beltzhoover, Berry, Bisbee, Black, Bland, Bragg, Joseph H. Burrows, Camp, Carlisle, Cassidy, Caswell, Chace, Clardy, Clark, Cobb, Cook, Cornell, Covington, William R. Cox, Crowley, Curtin, Cutts, Darrall, Davidson, Lowndes H. Davis, Dezendorf, Dowd, Dugro, Dwight, Charles B. Farwell, Flower, Frost, Geddes, Grout, Hall, Hardenbergh, Heilman, Herbert, G. W. Hewitt, Hooker, Houk, Hubbs, Humphrey, Phineas Jones, Jorgensen, Joyce, Kelley, Knott, Lacey, Ladd, Lindsey, Lowe, Marsh, Martin, Mason, Matson, McCook, McKenzie, Miles, Money, Moore, Morey, Morrison, Morse, Mosgrove, Moulton, Muldrow, Murch, Neal, Nolan, Orth, Pacheco, Paul, Pettibone, Phister, Prescott, Ranney, J. S. Richardson, Russell, Scoville, Scranton, Shaekelford, Shultz, Samas W. Singleton, Skinner, Dietrich C. Smith, J. Hyatt Smith, Sparks, Steele, Thomas, P. B. Thompson, William G. Thompson, Valentine, Van Voorhis, Wadsworth, Walker, Watson, West, Morgan R. Wise, Benjamin Wood, Walter A. Wood—108.

**RETIREMENT OF ARMY OFFICERS.** — In the House, on March 31st, the army appropriation bill being under consideration, Mr. Butterworth, of Ohio, said: "Mr. Chairman, I propose, if it please the committee, first to explain this bill, especially in relation to important changes.

"In connection with the clause providing for pay of the army, there is a clause relating to honorable retirement, or, to use a phrase more common, compulsory retirement. The language is as follows:

That on and after the passage of this act all officers in the army who are over sixty-two years of age shall be placed on the retired list; and no act now in force shall be so construed as to limit or restrict the retirement of officers as herein provided for.

"It is proper to say in this connection that the Military Committee propose to offer an amendment or two, a part of which I am instructed by the Committee on Appropriations to accept. This clause has been inserted here, the committee deeming it to be in order, to accomplish what has been desired for fifty years by the army and all those who desire to secure its efficiency. It is the concurrent testimony of officers in the army, old and young, that this clause, or a similar clause, is indispensable to secure that efficiency in the army

which is desirable; and, beyond that, to secure that justice to junior officers which ought not to be withheld.

"I have this additional word to say touching this clause, and then I shall not refer to it again unless in the course of general debate it shall become necessary. It is the history not only of our own country but of the world, that before armies in the field have been relieved from the command of aged and incompetent generals, before officers rendered incompetent for the arduous duties of the field could be weeded out by the necessities of the service, necessities which forced themselves on the attention of the law-making power or the power having authority to provide a remedy, thousands of men, soldiers, have been sacrificed, vicarious offerings on the altar of age and resulting incompetency. It was so at the beginning of our own conflict, and history but repeats itself in each war. It is true this is a time of profound peace, but it is wisely ordered that in time of peace we should provide for war.

"I have said this is the unanimous voice of all the officers of the army. So it is not only of those who would be promoted but of those who would be retired as well. This clause provides for the honorable retirement of those who have either served faithfully forty years in the service or have attained to the age of sixty-two years."

Subsequently, on April 4th, Mr. Henderson, of Illinois, by instruction of the Military Committee, offered the following amendment:

Strike out all of the pending paragraph after the word "act," in the seventy-eighth line of the same, and insert the following provisions:

"When an officer has served thirty-five years, either as an officer or soldier, in the regular or volunteer service, he shall, if he make application therefor to the President, be retired from active service and placed on the retired list; and when an officer has served forty years, either as an officer or soldier, in the regular or volunteer service, or is sixty-two years of age, he shall be retired from active service and placed on the retired list: *Provided, however,* This last provision shall not apply to the General, Lieutenant-General, and present major-generals of the army; and no act now in force shall be so construed as to limit or restrict the retirement of officers as herein provided for."

This was again amended, on motion of Mr. Butterworth, as follows:

*Provided, however,* This last provision shall not apply to the General, Lieutenant-General, and present major-generals of the army.

The amendment was then adopted, and the bill passed and sent to the Senate.

In the Senate, on June 6th, several amendments were adopted, one of which changed the age of retired officers from sixty-two to sixty-four years. In a conference committee of the two Houses, the following provision was accepted and adopted:

That on and after the passage of this act, when an officer has served forty years, either as an officer or

soldier in the regular or volunteer service, or both, he shall, if he make application therefor to the President, be retired from active service and placed on the retired list; and when an officer is sixty-four years of age, he shall be retired from active service and placed on the retired list: *Provided further*, That the General of the Army, when retired, shall be retired without reduction in his current pay and allowances; and no act now in force shall be so construed as to limit or restrict the retirement of officers as herein provided for: *Provided further*, That any officer who is supernumerary to the permanent organization of the army as provided by law may, at his own request, be honorably discharged from the army, and shall thereupon receive one year's pay for each five years of his service, but no officer shall receive more than three years' pay in all.

**COMMON PRIME MERIDIAN.**—In the House, on June 6th, the following joint resolution was considered:

Joint resolution to authorize the President of the United States to call an international conference to fix on and recommend for universal adoption a common prime meridian to be used in the reckoning of longitude and in the regulation of time throughout the world.

The Speaker: "The question recurs on ordering the joint resolution to be engrossed and read the third time."

Mr. Flower, of New York: "Mr. Speaker, this joint resolution was introduced by myself and referred to the Committee on Foreign Affairs. There are over three thousand scientists in this country who ask the passage of this resolution. It was drawn up by General Hazen, and is distinctively an American measure. If this convention is not convened by us it will be by other nations. It will not cost the Government one dollar."

Mr. Carlisle, of Kentucky: "I would like to ask the gentleman from New York if he will not accept such an amendment to this joint resolution as will provide for the appointment of these delegates by the President either from the officers of the navy or from the Engineer Corps? These are already paid by the Government of the United States, and there is no necessity for subjecting the Treasury to additional expense in the selection of such a board from outside scientists, when officers capable of performing the service are already being paid by the Government. We have a board of competent officers connected with the Observatory, the Coast Survey, and the Engineer Corps of the army, from whom such selections could be made."

Mr. Kasson, of Iowa: "The scientific people of the country are almost unanimous in their recommendations touching the importance of this matter. I have a letter myself from President Barnard, of Columbia College, New York, and have seen papers from others, who suggest that it should be left to the discretion of the President to select this board."

Mr. Belmont, of New York: "I do not think that necessarily any compensation will be paid to the delegates. The delegates from

foreign governments will, of course, look to their own governments. Our own delegates will only be three in number."

Mr. Flower: "I desire to have printed as part of my remarks the report submitted by my colleague (Mr. Belmont) from the Committee on Foreign Affairs."

The report is as follows:

The Committee on Foreign Affairs, to whom was referred joint resolution No. 209, authorizing the President to call an international congress to fix and recommend a common prime meridian, having had the same under consideration, make the following report:

There is at present no common and accepted standard for the computation of time for other than astronomical purposes. In the absence of agreement serious embarrassments are felt in the ordinary affairs of modern commerce, especially since the wide-spread extension of telegraphic communication and railroad transportation, and, owing to the diversity of methods now in use for indicating points on the earth's surface, navigators, geographers, and all who have occasion to use charts or maps, are put to the greatest inconvenience. International agreement upon this subject is demanded more imperatively every day, both by science and by trade. We have had as provisional or partial standards the meridians of Alexandria, the Canary Islands, Toledo, Cracow, Uranbourg, Copenhagen, Goetz, Pisa, London, Paris, Rome, Greenwich, Vienna, Ulm, Berlin, Nuremberg, Venice, Bologna, Augsburg, Rouen, Dantsic, Milan, Washington, and other places. As long ago as the time of Richelieu, an attempt was made to put an end to the confusion arising out of so great a variety of usages, and a congress was invited to assemble in Paris, in 1630, to agree, if possible, upon a common meridian. In speaking of this congress, Professor Barnard, of Columbia College, says:

"The Island of Ferro, the most southwesterly of the Canary Islands, was fixed upon, and a royal order establishing this decision was promulgated in July of the same year. Unfortunately, however, the exact latitude of Ferro with reference to any point on the continent of Europe was at that time unknown. The determination of its position was never made by authority, and at length, in 1724, it was resolved to assume it as 20° west from Paris. To name the island, therefore, without naming the point in it, was to leave the meridian unfixed, even had its general position been better known; at any rate this effort to establish uniformity was without practical result."

The Government has by section 435 of the Revised Statutes adopted the Greenwich meridian for nautical purposes, but the establishment of the Meteorological Bureau and Signal-Service system, with postal and other stations extending over nearly four hours of solar time in North America, has already compelled the adoption of the standard time of 7.35 A. M. at Washington, as the moment of making telegraphic reports from all stations, and the observations on our naval vessels are made at the same hour of Washington time. There is already pending in this Congress a measure (H. R. 5009) for securing national standard time to our ports of entry and principal cities. This would accomplish what is desired in the regulation of time in the United States, and might be incorporated in any internal system to be adopted, but the remaining points as to the construction of charts and the reckoning of longitudes would require the concurrence of other nations, and could only be determined by an international convention.

The propositions embodied in this resolution have been discussed in this country and in Europe by various commercial and scientific bodies, and the necessity for an international convention is generally conceded. At the recent meeting in Cologne and Venice, the idea of holding such a convention in



Washington was very much favored. It is obvious that the United States, having the greatest extent of continuous longitudinal area of any country traversed by railway, postal, and telegraph lines, should take the initiative in a movement so important to science and to the world's commerce. The committee therefore recommend the passage of the joint resolution.

The joint resolution was read the third time, and passed. It subsequently passed the Senate without amendment.

**POLITICAL ASSESSMENTS.**—In the Senate, on June 26th, Senator Pendleton, of Ohio, called up the following resolution relative to political assessments, which was offered by him on June 5th.

*Resolved*, That the Committee on Civil Service and Retrenchment be instructed to inquire whether any attempt is being made to levy and collect assessments for political partisan purposes from any employés of the Government in Washington, whether the same be under the guise of asking voluntary contributions or otherwise, and to report to the Senate by bill or otherwise, in its discretion.

Mr. Pendleton: "Mr. President, when I offered this resolution two or three weeks ago, I was anxious for information. I did not know the state of facts as they existed at that time. I had seen in the newspapers that the Republican Congressional Committee was about to take means to replenish its funds, and vague intimations were given that a circular under the form of a request for voluntary contributions, but in fact a demand for specific sums of money, was being distributed among the employés of departments and the employés of the two Houses of Congress. I had also heard that this circular was backed by authority, and that its language conveyed covert promises, which implied threats, in case the demands were not acceded to.

"I was quite astonished, somewhat startled, when I found that this resolution met with objection. I had supposed that no Senator would object to having the truth discovered as to this circular and its intent; and certainly that no Senator would object to the inquiry whether forced contributions were being levied under the guise of invitations for voluntary contributions. Mr. President, I was not quite as much astonished as those words would imply, and candor requires me to say that I was more astonished at the form than the substance of the objection. I had thought if gentlemen objected to it at all they would not do so in express words, but would consign my resolution to an untimely grave in the friendly embrace of a committee of investigation.

"Be that as it may, I desired information, and was sincerely seeking it. A friend of mine who sits upon this floor, and who had some opportunities of knowledge, gave to me one of the circulars. He gave it rather in confidence, though not entirely so; rather with the understanding that I should use it for my own information than otherwise. I was enabled to hand back that circular to him within two

days, not having exhibited it to anybody else, and scarcely having had time to read it myself, for as soon as the resolution appeared in the newspapers I received from many cities and from many States, and from many classes of employés of this Government, copies of the circular which had been sent to them. I have in my hand quite a number of copies of it. It is very nicely gotten up, written with care, as nicely as a *billet-doux* between lovers, or a hospitable invitation to dinner."

Mr. Hale, of Maine: "Not extravagantly."

Mr. Pendleton: "I do not know that they are extravagantly gotten up, but that would depend altogether upon the moneys the committee may finally have from the sources on which they have drawn."

Mr. Hale: "Will not the gentleman hold up one of them, so that Senators may see it?"

Mr. Pendleton: "I will hold up one of them, and read it also, for the delectation of my friend from Maine. Here it is in full:"

[Jay A. Hubbell, chairman; D. B. Henderson, secretary; executive committee, Hon. W. B. Allison, Hon. Eugene Hale, Hon. Nelson W. Aldrich, Hon. Frank Hiseock, Hon. George M. Robeson, Hon. William McKinley, Jr., Hon. George R. Davis, Hon. Horatio G. Fisher, Hon. Horace F. Page, Hon. W. H. Calkins, Hon. Thomas Ryan, Hon. William D. Washburn, Hon. L. C. Houk, Hon. R. T. Van Horn, Hon. Orlando Hubbs.]

HEADQUARTERS OF THE  
REPUBLICAN CONGRESSIONAL COMMITTEE, 1892.  
520 THIRTEENTH STREET, NORTHWEST,  
WASHINGTON, D. C., May 15, 1892.

SIR: This committee is organized for the protection of the interests of the Republican party in each of the congressional districts of the Union. In order that it may prepare, print, and circulate suitable documents illustrating the issues which distinguish the Republican party from any other, and may meet all proper expenses incident to the campaign, the committee feels authorized to apply to all citizens whose principles or interests are involved in the struggle. Under the circumstances in which the country finds itself placed, the committee believes that you will esteem it both a privilege and a pleasure to make to its fund a contribution, which it is hoped may not be less than \$—.

The committee is authorized to state that such voluntary contributions from persons employed in the service of the United States will not be objected to in any official quarter.

The labors of the committee will affect the result of the presidential election in 1894, as well as the congressional struggle; and it may therefore reasonably hope to have the sympathy and assistance of all who look with dread upon the possibility of the restoration of the Democratic party to the control of the government.

Please make prompt and favorable response to this letter by bank-check, or draft, or postal money-order, payable to the order of JAY A. HUBBELL, acting treasurer, P. O. box 589, Washington, D. C.

By order of the committee:

D. B. HENDERSON, Secretary.

"As far as I have seen, all of these circulars are in exactly the same language, except that a blank was left in each originally, to be filled by the amount which a certain specified proportion of the salary received would reach. Now, sir, in order that there may be no charge of unfair dealing with this committee and its circular, I have read to the Senate every word

of it, and I ask the Senate to consider it a little in detail.

The committee is organized for the protection of the interests of the Republican party in each of the congressional districts of the Union.

"Party from beginning to end, the country nowhere alluded to—'the interests of the Republican party in each of the congressional districts.'

In order that it may prepare, print, and circulate suitable documents illustrating the issues which distinguish the Republican party from any other, and may meet all proper expenses incident to the campaign, the committee feels authorized—

"Feels authorized!" What necessity is there to have authority to invite gentlemen who desire to make a voluntary contribution to a political fund? What is the necessity for any authority for an invitation of that kind?

"Authorized!" By whom authorized; for what purpose authorized? To apply for contributions to the Republican expense fund! Apply to whom? Apply to 'all those whose interests are involved in this struggle.'

"The committee discriminates very closely between those whose principles lead them to desire the success of the Republican party and those whose interests are involved in the struggle; those whose principles or interests induce them to take an interest in this struggle. Who are they, Mr. President? Who are interested beyond what their principles require in the success of the Republican party in the coming campaign? Certainly the officers; the office-holders; those who enjoy the powers and emoluments of office; those who are in possession of the political power and the moneyed emolument at the disposal of the party. When application is to be made for authority to apply to these officers for a money contribution, who is it that can give the authority to make the application? Manifestly those who have the power of appointment and dismissal; manifestly those who can say to these men whose offices are involved, 'Contribute to the success of this party, or the power of appointment and dismissal is hung over your head.' I submit to gentlemen on this committee that the paraphrase was entirely unnecessary. I submit that the circumlocution was entirely out of place, and that it would have been much more direct and much more pointed and equally delicate to have said, 'We are authorized by those who have the power of appointment and dismissal to say to you whose offices are involved in this struggle that we are authorized to make this application for money to you.'

"The circular starts out with a declaration on its face, which any man who can read at all can read between the lines: We are authorized by those who hold your places in their hands to apply to you office-holders of the Government to make this contribution because your interests are involved in this struggle.

"The circular continues:

Under the circumstances in which the country finds itself placed, the committee believes that you will esteem it both a privilege and a pleasure to make to its fund a contribution.

"A privilege and a pleasure!" Indeed, a blessed privilege! an exquisite pleasure! These officers, forsooth, would never have had the opportunity of enjoying this privilege and pleasure if this committee had not given them the opportunity and the method; the opportunity in the sinking circumstances of the fortunes of the Republican party, and the method by contributions to the committee! Knowing that these office-holders could not have enjoyed this privilege and pleasure except for its invitation; knowing that as soon as they heard of it, they would be ready and willing, nay, eager and anxious, to embrace the opportunity; fearing lest in a moment of enthusiasm and desire, these office-holders might indulge to excess in the enjoyment of the pleasure and privilege; fearing lest on the other hand an ascetic self-denial might restrain them below the bounds of legal moderation, this committee informs them that, in its judgment, it would be about right that clerks having \$900 a year should indulge in this enjoyment to the amount of \$20 worth. Then fearing that might be a damper upon their ardor, the committee express the hope that the contribution shall not be less than the amount suggested by the committee, to wit, \$20.

The committee is authorized to state that such voluntary contribution—

"Voluntary contribution!" Voluntary as the contribution the traveler makes to the pocket of the highwayman when commanded to stop and hold up his hands; voluntary as the contribution which the man of the world makes to the harvest of the Great Reaper when he puts in his scythe—

voluntary contribution from persons employed in the service of the United States will not be objected to in any official quarter.

"Mr. President, is a voluntary contribution objected to anywhere? And does it need any close discrimination as to that passage to see that it means that, while contributions will not be objected to in any official quarter, a refusal to make the contribution will meet with the condemnation of all official quarters?

The labors of the committee will affect the result of the presidential election in 1884, as well as the congressional struggle; and it may therefore reasonably hope to have the sympathy and assistance of all who look with dread upon the possibility of the restoration of the Democratic party to the control of the Government.

"With dread." Who look with dread upon it? What sensible man in this country looks with dread upon it? The people of the country do not look with dread, the material interests of the country do not look with dread, the patriotism of the country does not look with dread, for at the last two presidential elections the people of this country have been almost equally divided in numbers upon the question



as to which party better deserves success. In the presidential election before the last, it is an undisputed fact that a numerical majority of the people of the United States did actually vote to restore the Democratic party to power.

"We appeal to you for sympathy and assistance, and we hope you will make prompt and favorable response to this letter.' How? By expressions of confidence? By telling us the political necessities of your neighborhood? By going forth as an apostle to demonstrate to the people the excellence of the principles of the Republican party? No, sir; none of such sympathy we want. It is your assistance which we hope you will promptly send to us in the shape of 'a bank-check, or draft, or postal money-order,' payable to the treasurer of this committee.

"Now, Mr. President, I will not insult the Senate by undertaking to prove to it that this is no invitation for a voluntary contribution. I will not waste its time by showing that it is a demand for a specific sum of money, levied according to a rule, accompanied by a promise and a threat. 'Your purse or your official life' is the alternative offered; or, to use the language of President Garfield in describing a circular almost identical in terms with this, 'It is a circular sent to the employés of the Government upon the distinct understanding that, if they fail to make return according to the demand, in check or postal money-order, others will be found to take their places who will receive their salaries and pay up the assessment.'

"Mr. President, to whom has the circular been sent? I venture to say here upon this floor, and I speak it upon information which challenges my belief, that this circular has been sent out to every person whose name can be found on any of the rolls of employés of the Government, however remote they may be from the source of power itself. The circular has been sent to the Boston custom-house—seven hundred copies of it—and a demand made for an aggregate of \$15,000. It has been sent to the armory at Springfield, and an assessment of \$18 been made upon each armorer in that institution. It has been sent to the great offices in New York, the post office and the custom-house, and the collector's office, and the various institutions connected with the Government there. These offices have won exceptional credit by reason of their freedom from the debasing arts of political assessments, and yet are to be again plunged into the mire from which they so laboriously have emerged. It has been sent out to employés at Chicago, and assessments made there of the exact sum of \$9.30. How considerably accurate in computation! It has been sent to every postmaster in the country; at least, I have returns from almost every State east of Nevada. It has been sent to the men engaged upon the works on the Ohio River at Marietta, and \$18 has been assessed and demanded of men who

day by day for their daily wages cut stone in making the dam. It has been sent to every employé in the departments at Washington, every clerk, and they have been assessed in various amounts from \$18 to \$50. It has been sent to men who are engaged in daily labor on the Capitol grounds, digging up and beautifying these grounds, and \$6 has been assessed upon each of them. It has been sent to the boys in the Printing-Office, to whom you pay only a dollar per day and furlough them without pay, and \$7 has been demanded from each of them. It has been sent to enlisted men in the army, and an assessment of \$18 made upon men who are paid from the army appropriation bill. Wherever a name can be found upon the pay-roll of the Government for any amount, great or small, this circular has been sent, or is now being sent.

"I said it had been sent to every clerk in all these departments. Why, sir, it has been sent to those unfortunate ladies whom the exigencies of life now compel to support a family off the pittance painfully earned by them, which would scarcely have sufficed to dispense their yearly charity in other days. It has been sent to the women who scrub out the departments in this city, whose poverty is so great that when they leave for their daily work they are obliged to lock up in their close and fetid rooms the infant children who can not be allowed to wander in danger in the streets. It has been sent to the employés of the Senate, and men have been required to pay \$30 in order that they may hold their places.

"Nay, more, Mr. President, it has been sent, at least in the other House, and possibly in this, to the little pages—bright, intelligent, active little fellows, who do the bidding of members there and here. I imagine I can see this grave committee, with this circular in their hands, going to one of these little pages, and urging him by his appreciation of the emergencies of the country, by his appreciation of the excellence of Republican practices, by his dread of the restoration of the Democratic party to power, to make his contribution of \$9 in order to avert such a terrible calamity.

"Mr. President, if this were not a sad scene of political degeneracy and partisan tyranny, it would be in many of its aspects a broad farce.

"I have no fitting words in which to express my apprehension of the degradation and danger of this whole system, of which this is one of the most dangerous outgrowths. It demoralizes and breaks down every man connected with it, those who give and those who take, alike. Among the names on this circular are some of our own cherished associates and members, men of the other House, also, who stand high in the estimation of their party and their country. They are important factors in wielding the political destinies not only of their party but of their country, honorable, upright, excellent gentlemen, to whom we would willingly commit and do commit our honor, and

if necessary would commit our lives, men who could not be forced, even by torture, to go themselves, and with this circular in their hand, to make application to these persons to whom it is sent; men who could not be induced to do it; who would feel it to be a personal dishonor to do it. Yet together they combine, and put in operation this machine, which has no heart to be touched, no body to be punished, no soul to be damned, to visit the houses of the widow and the fatherless, and extract from them, for political partisan purposes, a large proportion of their hard earnings.

"It degrades the men to whom it is sent. What sense of self-respect can be left to the man who feels himself compelled to submit to this extortion, which his honest judgment abhors, and which his penury rejects, and yet is obliged, with a hypocritical smile, to pretend that it is a voluntary contribution? What faithful, honest, personal service in office can a man render when he feels that upon his very best service is put this badge of servitude? How can he admire our institutions with his whole heart as he ought, and devote himself absolutely to the duties of an office, when he is made to buy with money that office which he knows, and everybody knows, is a public trust involving duties to the public? What discipline can there be in a system when all above him, and all below him, are bound together by the consciousness of this common degradation? The galley-slaves are chained together; and their proximity, making them conscious of the common infamy, the common degradation, and the common punishment, leads them to hate, and despise, and dread, and suspect, and injure each other.

"Mr. President, this system is a great wrong to the people. A fair day's work and a fair day's pay is common honesty imported into our Government. If these employes can have extracted and abstracted from their salary 2, or 4, or 10 per cent, and yet sufficient remuneration is left to them, then I say the deduction should be made directly from their salary, and be left in the Treasury.

"Now, Mr. President, how are we met when we make this arraignment of this practice of the party in power? One gentleman who signs himself 'assistant attorney-general,' with a great deal of ostentatious gasconade, says that he defies and spits upon the enactment which is in existence because it is no law, for he has examined carefully the Constitution of the United States, and does not find any clause which authorizes Congress to prohibit voluntary contributions for lawful objects. Why, sir, the man who in the face of that circular can talk about voluntary contributions, is either entirely ignorant of the force of language, or of the substance of things; and in either alternative discussion with him would be useless.

"The gentleman whose name is signed to the circular as the acting treasurer of the com-

mittee, vaunts himself that he has broken no law. Listen to his defense. The law declares:

That all executive officers or employés of the United States not appointed by the President, with the advice and consent of the Senate, are prohibited from requesting, giving to, or receiving from, any other officer or employé of the Government any money or property, or other thing of value, for political purposes.

"He says, 'I have committed no crime, I have not violated the law, because I am not an officer or employé of the Government.' Putting himself upon a decision made in the last century, that a Senator of the United States was not liable to impeachment, he says: 'I am not liable to this law, because I am a member of Congress, and not an officer or employé of the Government. If I were a door-keeper, or a clerk, or a messenger, I would be liable under the statute. As a member of the House of Representatives I am not.'

"Mr. President, that question is to be taken into the courts. I will not anticipate their decision. I say to the gentleman who signs this circular that before he gets through he will find if he has not landed some of these men in the penitentiary he has drawn them perilously near to the verge of a criminal conviction."

Mr. Hale: "Mr. President, I do not mean to take up too much time in replying to the Senator from Ohio (Mr. Pendleton), but there are some things which he has said, there are some impressions that he has conveyed, no doubt honestly, to the Senate and to the public mind upon which I wish to touch. In the first place, I desire to say that as to the circular which has been paraded here, signed by the Secretary of the Republican Congressional Committee, with the names of the executive committee at the head, my own included, I have no apology to make.

"It is almost exactly like those that were sent out in 1880 and in 1878, when I had the honor to be chairman of the committee, and, as the Senator from Iowa (Mr. Allison) said, those two were submitted to and approved by the then 'civil-service reform' President, Hayes.

"There has been no intention on the part of the committee in sending out this little circular, three inches by eight, as shown by inspection, of oppressing anybody; and it has not been sent out in the dark. There has been no secrecy, nothing whatever covert, nothing whatever apologetic, on the part of the Republican Congressional Committee in this act signed by Colonel Henderson, its secretary. If, in sending out numerous circulars asking employes of the Government if they were willing to contribute to a cause which they believe to be the greatest, politically, that agitates men's thoughts in this country, there has been here and there a circular delivered to some poor woman in a department, or outside, of Washington, that has never been intended. The



whole scope and aim of political contributions as engineered by congressional committees, whether on the one side or the other, have never been a mystery, and there is no more mystery about it to-day than there ever was before. No woman has ever been requested except where under her initials she has appeared as a man, nor has any poor day-laborer been intended to be even solicited. If there has been any such poor laborer that has received any invitation of this kind, he may be assured that he will never be troubled again by the Republican Congressional Committee, whether he pays or not.

"But the committee, without any pretense, and without any sentimentalism, finds itself, as the organ of the Republican party, confronted with a most important campaign. The congressional elections, upon which depends the fate of the next House of Representatives, are now impending, and so long as men believe that one thing is right in politics and another thing is wrong, so long as men believe that the party with which the Senator from Ohio is identified, and of which he is a distinguished leader, is bent upon mischief to the country, and so long as they believe that in the Republican party and in its future ascendancy is bound up the good of the country, neither you, sir, nor the Senator from Ohio, nor I, will ever find a day when men will not be willing to put in time and effort and energy and part of the means that have been given to them to maintain the right and keep down the wrong. I want to say to the Senator from Ohio that with all of the pity that he has arrayed for the poor woman whom the Republican committee has not sent to, for the laborer in his shop whom the Republican committee does not seek, for the orphan that he says is besieged, but is not, and notwithstanding all that he has said about this being compulsory, I can tell him from the Republican Congressional Committee that the constituency to which these invitations have been sent has been found a willing constituency.

"In the last days of the last Democratic administration that ever was, and, putting my word against that of the Senator from Ohio, I should be tempted to say that ever will be, in the last days of the Democratic administration under Mr. Buchanan, not only were the clerks in the departments found followed up under a belief and a threat of removal to the paying of involuntary contributions, but they were hounded from room to room by superior officials, the heads of the bureaus and of the departments standing over them; and the President of the United States, the leader of his party, a veteran in political strife and political organization, was found consulting with the instruments through which this was done from day to day and week to week, including Sundays, for the purpose of making this great haul more exhaustive, so that no man should escape from its meshes. Yet to-day the Senator from

Ohio stands up in his place and declares the former purity and glory of the Democratic party, and defies the Republican party to point out in its history anything touching what he calls the degradation of civil service by reason of contributions."

Mr. Van Wyck, of Nebraska: "Mr. President, I agree with much that the Senator from Maine (Mr. Hale) has said, particularly where he proved so conclusively that the Democratic party is responsible for the abuse which has crept into and is being exercised by the Republican party to-day. That part of his address may be very well as a reply to the Senator from Ohio (Mr. Pendleton), but certainly I desire some better warrant for my action than the record of the Democratic party. Has the Senator forgotten that in the evidence which he read the charges were made against that organization in the decay of its existence? Has he forgotten that those facts were the terrible arraignment aimed against it, and when they were brought into the grand assize of this republic and tried upon those charges they were found guilty and driven from power? Does the Senator desire that the parallel shall be complete?"

"Mr. President, it seems surprising that no better authority can be adduced than that to which the Senator alludes, that this system was exercised to a greater extent, if you please, in the days of the Democracy than now. That is certainly no justification for a weaker exercise of the power.

"The Senator says that the clerk and employé was followed even to the receipt of his money from the Government, and it was paid directly from the Treasury for the benefit of the Democratic party. I ask my friend if we do not go nearly as far to-day?"

"He further states that the assessment is voluntary, and the circulars are sent to prominent citizens throughout the country. I ask the Senator from Maine or the Senator from Iowa if in the circular sent to private citizens any amount is designated? Why is the distinction made when the circular is sent to an employé, and the committee say they hope his contribution will not be less than a certain sum? Is that inserted in the circular which is sent to men of wealth, who are supposed to feel a great interest in the legislation of the country? When the circular is sent to the eleven Bessemer-steel manufacturers in the United States, are they asked to give two per cent upon their income? Will the Senator from Iowa explain?"

Mr. Allison, of Iowa: "Now, my friend wants to know if we assess two per cent upon the profits of Bessemer steel? I do not know what the circular contains in that regard, or whether we have issued a circular to the Bessemer-steel men, or have written them letters; but I should say, for one, that the Bessemer-steel people ought to contribute pretty liberally to such a fund."

Mr. Van Wyck: "The Senator from Iowa has not exactly answered the question, but the point is, the circulars which go to the employes of the Government designate how much they are expected to pay. Am I right in that?"

Mr. Allison: "I think that is true in part, and in part not true."

Mr. Van Wyck: "Precisely. It has been said that the circulars are sent to those out of Government employ as well as those in the employ of the Government. Then I want to know why a distinction is made between the circulars sent to employes of the Government and those sent to private citizens, if it is purely voluntary. Will the Senator explain that?"

Mr. Allison: "Am I to be catechised now by the Senator from Nebraska? If we sent a circular, for example, to a rich man like the Senator from Ohio—our circulars, of course, do not go to him—but if we sent circulars to leading Republicans in the country, I do not suppose that we should fix a sum. If we send circulars, however, to men who are in public employment, the circular names a minimum sum, as was stated by the Senator from Maine. The Senator from Nebraska asks me why that is done. It is done simply because we only expect to receive a small sum. Did the Senator from Nebraska hear me when I stated in his presence, or in the presence of the Senate, that in the last campaign of all the employes less than one tenth have contributed one dollar? I ask him to name a man in public employment who has ever been disturbed in the slightest degree because he did not contribute to a campaign fund?"

Mr. Van Wyck: "I agree with my friend, but I am endeavoring to see how far this matter is voluntary. That is what I was proceeding to find out."

"I think I shall be excused for saying this much or a little more on this line. I think I have a right to say that it is not prudent for the Republican party to adopt that policy which largely contributed to the destruction of the Democracy. I claim the right to occupy that ground as a Republican to-day. I choose as a Republican here, differing with my associates, to take warning from the past. If the party of the gentlemen on the other side has gone to decay, and that too by the voice of the American people, I think it behooves the organization with which I am connected to at least take warning from the lights, the false lights, if you please, which brought them to ruin and destruction. I desire to be excused from any such fatality, or at least from the toleration of any such evil."

Mr. Hale: "I said that no reasonable man if he examines faithfully and fairly into the matter will object to it; that it is purely and essentially voluntary; that no man, woman, or child is harmed, or has been or will be, if he or she declines to pay. I said that the Senator from Ohio had challenged me to show in regard to the Democratic party any course

tending to what he called the degradation of political assessments; and, not as an excuse, for I do not ask for any excuse for the Republican committee—I stated in terms that it was not to excuse it, but to show that the Democratic party of the olden time did a thousand-fold worse—I pointed out the fact that they ran in paths where we would not pretend to penetrate. I quoted the examples that I cited from the "Record," and I did it for that purpose. I say to the Senator from Nebraska, and not as an excuse for what we are doing now, for I ask no excuse—"

Mr. Van Wyck: "The Senator read the extracts to condemn the practice of the Democratic party."

Mr. Hale: "Certainly I did, and I do condemn that method."

Mr. Van Wyck: "That is just what I mean."

Mr. Hale: "Those were different methods from ours."

Mr. Van Wyck: "The only difference was that the Democratic party was bolder than we are. They always have been in such things. They went further than your circular says, but you were more shrewd than they, probably. Either the Senator from Maine or the Senator from Iowa said that they were careful of what they did; that they were prudent; that they had eminent counsel to examine this question to see how near they could go to the felon line. They wanted to see just how far they could go and be safe in this matter; that was all. I do not want to force my Republican brethren, only I beg to be excused from following the methods which the Democratic party pursued. It was a thorny road for them, and I propose not to wear that kind of stones in my shoes."

"At the commencement of this session we had thousands upon thousands of petitions praying us to regulate interstate commerce. Those petitions were referred to the appropriate committee, and there they have slumbered. Just a little healthy legislation in that direction would have helped the Republican party more than the few thousand dollars which we collect in that way."

This debate was terminated by adjournment, and not resumed.

**PROPOSAL TO PLACE GENERAL GRANT ON THE RETIRED LIST.**—In the Senate, on December 5th, a bill was introduced to place General Ulysses S. Grant on the retired list of the army, with the rank and grade of general, and pay accordingly.

Mr. Vest, of Missouri: "Mr. President, this bill is an innovation upon the established practice and principles of the Government in regard to the retired list of the army. This bill is utterly without precedent in the legislation of Congress. It takes General Grant from civil life, after he had voluntarily left the military service, and places him upon the retired list in utter disregard of the requirements and provisions of existing law."



"In the debate upon this bill in the Forty-sixth Congress, the Senator from Illinois was pleased to ascribe the opposition to this measure to partisan prejudice, and he exhorted Senators on this side of the chamber to lay aside all political feeling and approach this bill in a broad and catholic spirit of nationality, as giving credit to a great soldier.

"Mr. President, I desire to place before the Senate an act of magnanimity performed by the Republican party, which not only 'broke the column of this mighty nation's array in the presence of future generations,' but in the presence of this generation added another name to the long list of those who have fallen victims to 'party prejudice.'

"In the Forty-fifth Congress a bill was passed, only six votes dissenting, authorizing the President to place upon the retired list my predecessor upon this floor, General James Shields, of Missouri. That bill came to a Republican Senate. Broken in body and in fortune, maimed by shot and shell, with the snows of seventy winters upon his head, this gallant Irishman came to the Congress of his adopted country, and begged for the pittance which would give comfort to his declining years. Bulwer, with matchless pen and pathos, has drawn the picture of a wounded veteran about to pledge for a crust of bread his cross of the Legion of Honor, given him upon the battlefield by the Emperor himself; but this picture of fiction grows faint and colorless when I state that the gallant old soldier who came for relief to the Forty-fifth Congress had been forced by actual want to pawn the swords presented to him by grateful States for gallantry and heroism. It would seem, Mr. President, that a case like that would exorcise even the fiend of party; but let the record show.

"The bill placing General Shields upon the retired list passed the House with only six votes opposing, and was taken up in the Republican Senate. By a party vote, only one Democratic Senator voting in the affirmative, the bill now pending, placing General Grant on the retired list, was added as an amendment.

"The Senator from Vermont (Mr. Edmunds), who I am sorry to see is not now in the chamber, after having voted for the amendment, proceeded, in a speech remarkable for its clearness and emphasis, to give the reasons why he should vote against the bill as amended.

"I need only add that after this presentation of the subject, followed by the Senator from Illinois, now presiding officer of the Senate, in the same line of thought, the bill placing General Shields and General Grant upon the retired list was defeated by a vote of thirty to thirty-four in a Republican Senate.

"Mr. President, if the arguments made in the Forty-fifth Congress were sufficient to defeat the bill giving to an aged veteran a bare support for himself and family out of the vast wealth which his sword had helped to win for his adopted country upon the plains of Mexico,

how much more conclusive must be the same arguments against the bill now pending!

"General Grant is not now within the requirements of the law, nor does he ask or need the proposed legislation. He is in robust health, in the prime of life, and beyond pecuniary want. The first American soldier to receive the rank of general, he was the first American citizen to seek for a third term, the highest office within the gift of the republic. During his second term as President, the salary of that office was doubled for his benefit; and he is to-day surrounded by wealthy connections, living luxuriously in the city of New York, and possessed, besides other fortune, of the income from \$250,000 donated to him by the public. To give General Grant the full measure of glory as a great soldier is one thing; to tax the people of this country \$13,500 annually in order to enrich a man already in affluence is a different proposition.

"To Grant the soldier this country, forever united, will be forever grateful; to Grant the politician it owes nothing. Not the American people, but General Grant and his political followers, marred the symmetry of his colossal figure as it stood before the world at Appomattox. To the pages of history emblazoned with military achievements unequalled in modern times has been added another page unequalled in the annals of modern corruption.

"Sir, it is not for me to paint the picture. It has been done by a master-hand, and in colors which will never fade. The junior Senator from Massachusetts (Mr. Hoar), chairman of the Chicago Convention, is the artist, and if I again point to the canvas upon which in the Belknap trial he placed the somber portraiture of Grant's second term as President, it is not because the contemplation is pleasant to any American. Said the Senator from Massachusetts (Mr. Hoar) then:

"My own public life has been a very brief and insignificant one, extending little beyond the duration of a single term of senatorial office. But in that brief period I have seen five judges of a high court of the United States driven from office by threats of impeachment for corruption or maladministration. I have heard the taunt, from friendliest lips, that when the United States presented herself in the East to take part with the civilized world in generous competition in the arts of life, the only products of her institutions in which she surpassed all others beyond question was her corruption. I have seen in the State in the Union foremost in power and wealth, four judges of her courts impeached for corruption, and the political administration of her chief city become a disgrace and a by-word throughout the world. I have seen the chairman of the Committee on Military Affairs in the House, now a distinguished member of this court, rise in his place and demand the expulsion of four of his associates for making sale of their official privilege of selecting the youths to be educated at our great military school. When the greatest railroad of the world, binding together the continent and uniting the two great seas which wash our shores, was finished, I have seen our national triumph and exultation turned to bitterness and shame by the unanimous reports of three committees of Congress—two of the House and one here—that every step of that enterprise had been taken in fraud. I have heard in

highest places the shameless doctrine avowed by men grown old in public office that the true way by which power should be gained in the republic is to bribe the people with the offices created for their service, and the true end for which it should be used when gained is the promotion of selfish ambition and the gratification of personal revenge. I have heard that suspicion haunts the footsteps of the trusted companions of the President."

"Sir, it is not my picture; it is drawn by another hand, and it will live as long as the English language is spoken or written.

"Mr. President, I presume it has been determined that this bill shall pass the Senate. It is not my hope or expectation to defeat it, but I could do no less than place upon record the reasons why I shall vote against a measure which in my judgment is without a single claim upon the justice or generosity of the American people."

Mr. Logan, of Illinois: "Mr. President, the Senator from Missouri always speaks well on any subject, but, like other men, he sometimes falls into errors. I will try to answer his propositions one at a time if I can. His first proposition is that there is no precedent for this bill, as I understood him. That is a most astounding statement to me, and certainly it ought to be to the Senate. This proposition is to take a man who is now a civilian and authorize the President of the United States to appoint him to the army with a view of putting him on the retired list. That is the proposition, and the Senator from Missouri says there is no precedent for any such thing. Why, sir, on your calendar now are bills of that character. There has not been a Congress since 1866 that has not passed bills authorizing the President to nominate men to the army who had become civilians either by resignation or otherwise from the army; and there has not been a President since the war down to the present time who has not by virtue of bills that have passed Congress nominated civilians to the army, and they have been confirmed by the Senate.

"The next proposition he makes is that inasmuch as General Shields, who was his predecessor on this floor, was not placed back in the army as he requested to be, being old and feeble and poor, therefore no other man ought to be. I will say to the Senator that the refusal to place General Shields back in the army did not prevent the Senate of the United States from placing Colonel Lee and Colonel Haller back in the army, who had been out longer than General Shields. So there is nothing in that. I call the Senator's attention to the fact that when the bill for General Shields was before the Senate of the United States, asking that he might be put back in the army, so that he might be placed on the retired list, although I was not a member of the Senate at that time, I wrote a letter and published it in the public prints to the very Senator who made the motion the Senator spoke of to amend the bill which defeated the bill.

That letter was published all over this country, defending General Shields, and insisting that in right and justice the bill for his benefit ought to pass.

"So the Senator can not lay it at my door that that bill was not passed, and General Shields was not put in the army, because I was one of his friends and one of his advocates, publicly, although I had not a vote on this floor at the time. I gave the law in that letter, and I gave the reasons for it, not so ably perhaps as the Senator from Missouri would have done, but as ably as my feeble ability would allow.

"Then, sir, another proposition the Senator states is that this bill is presented for the reason that General Grant was defeated at Chicago, and because of that certain of his friends desire to remunerate him. Why, I am only surprised, as I go along examining the speech of the Senator, at his want of recollection. Does the Senator—and I call his attention specially to this—pretend to say, and shall it go broadcast to the country, that this bill was only introduced after General Grant was defeated at Chicago? Is that his statement? He is woefully at fault in that. Senator Blaine introduced in Congress, long before Chicago was ever named as the place for the last Republican Convention to be held, a bill putting General Grant on the retired list. The proposition had been made in the Senate and in the House long before General Grant was ever mentioned as a candidate before the Chicago Convention. So the Senator's beautiful picture of untying the money-bags and remunerating the fallen fortunes of a candidate for the presidency goes for naught when you come to the facts.

"Why, sir, shall the Congress of the United States, the people of this country, refuse to give the President authority to renominate General Grant to the army for the purpose of putting him on the retired list? For what? Merely as an acknowledgment by the whole country that the people were, and that the people yet are, willing to show their gratitude to the one man who, above all others, did more in the army to save his country than any other man. Some say, 'Why let us retire ex-Presidents?' When you retire ex-Presidents and put them on the retired list you do that because they have been Presidents of the United States. That is not the retirement that I desire to see given to General Grant. I desire to see him retired on account of his military services, and not for any services as a civilian; and that is what is proposed by this bill."

Mr. Butler, of South Carolina: "I do not like to interrupt the Senator from Illinois, but I do not wish to be put in the position of voting against this bill because of prejudice. No such motive as that actuates me. I have not one particle of prejudice against General Grant. There is scarcely an honor this country could



give him that I would not be quite willing to bestow on him. The ground on which I shall vote against the bill is this, if the Senator desires to know: I have always understood that the retired list of the army was intended for disabled soldiers, for officers who had served their time out in the service of the country, and were put there because they were unable to discharge the duties of the military service. I have heard no pretense—if the Senator has alleged it, it has escaped me—that General Grant in the first place desires retirement; I say in the second place that he does not need it pecuniarily; and in the third place it can certainly confer no honor upon him.

"I oppose the bill, and shall vote against it purely on those grounds, not for the reason that I am not quite willing to recognize all the services General Grant has done his country. It is not that I am not quite willing to confer upon him any honor on earth that we can give him. If the Senator from Illinois will state that General Grant needs \$100,000 or \$500,000 to prevent his suffering, I will vote for it to-morrow; but simply to vote to put him on the retired list of the army is certainly no additional honor, and it puts him, in my judgment, in the attitude of a beggar before the country, when he is not in necessitous circumstances."

Mr. Logan: "Mr. President, the friends of General Grant, I hope, will be permitted to be the judges on that for themselves. Gentlemen who are all the time afraid that General Grant will be humiliated are so tender of him that they do not want to humiliate him, and hence they criticise his friends. But I say, as a friend of General Grant, that General Grant would consider it an honor to be put on the retired list, and I should consider it an honor to put any soldier on the retired list after he has passed through such services as Grant has, to show that the country still recognizes his services; and there is where the honor of the thing is. It is not the amount of money involved, but it is the fact that the country recognizes that he did great service for it."

The President *pro tempore*: "The Senator from Delaware now moves an amendment to strike out all after the enacting clause and insert what will be read."

The acting Secretary read the words proposed to be inserted, as follows:

That hereafter there shall be paid to every President of the United States who shall have served or may hereafter serve in said office, and who shall have retired from the same, a sum annually during his life equal to one quarter part of the annual salary paid him while in said office: *Provided, however*, That said sum shall not be paid to any President while holding said office by any re-election thereto.

Mr. Bayard, of Delaware: "Mr. President, this bill upon its face presents that which it would seem ungracious for any American to oppose. It seems to me, now, that there is no need for additional recognition of the eminent military services of General Grant. They are

already recognized, not denied, but everywhere accepted, approved by the American people. Still I am not disposed to interpose objections to further demonstrations of respect, honorable to their recipient, entirely so to those who offer them; but this is a law-making body. This bill proposes in its terms to suspend, 'for this purpose *only*,' a general law of the United States. Now, what is that law? As early as 1861 the policy was adopted of allowing officers of the army who had served well and faithfully for a long time, who had been disabled by wounds or disease from active service, to be provided with an honorable and fairly remunerative retirement. It was a wise, beneficent act. It has been followed by amendments. It was intended for a class of military officers, and for that class only—officers in the Army of the United States, and none others. By section 1,258 of the Revised Statutes, the number of these beneficiaries honorably to be retired is limited to three hundred. I understand that, since the enactment of that law, another hundred has been added to the list by some amendment to an appropriation bill, which has not as yet found its way into the reprint of the Revised Statutes. So that there is now a maximum of four hundred officers of the army who may be upon this list, although by the terms of the law 'any less number to be allowed thereon may be fixed by the President at his discretion.'

"This general law for the retirement of officers who have seen long service or have been disabled, not only is a relief to them, but it is a relief for their juniors in rank and service, who in a time of profound peace have but two avenues by which they are to escape from a prolonged and painful retention in their former rank. The death of a superior officer will create a vacancy; the placing of a superior officer upon the retired list will create a vacancy, for section 1,257 provides:

When any officer in the line of promotion is retired from active service, the next officer in rank shall be promoted to his place, according to the established rules of the service; and the same rule of promotion shall be applied, successively, to the vacancies consequent upon such retirement.

"Therefore two benefits are accomplished by placing an officer upon the retired list. He enjoys the repose that long and faithful service has won for him; and his junior in rank has a way opened to his legal and regular advancement 'according to the established rules of the service.' Now it is proposed, by an instance of especial personal favor, to invade those rules, to place in the way of just promotion one more obstacle taken from civil life for this purpose. As I said before—"

Mr. Logan: "Will the Senator allow me?"

Mr. Bayard: "Pardon me. Let me state my own case, and then I will hear my friend with great pleasure."

Mr. Logan: "I do not want to discuss it at all."

Mr. Bayard: "I am taking the text of the law and discussing it. I do not propose to argue this case upon the question of personal merit. I would be second to none in a fair and generous acknowledgment of all that is due to the eminent individual named in this bill. He needs from me no praise. He has it to-day in abundance unquestioned, and, I doubt not, thoroughly deserved. But I do deny the justice or the wise policy of invading the well-established rules of the service, and bringing from civil life any individual, however distinguished, at the cost of many other members of the military service, who, in obscurity from the public observation but not the less in faithful and dutiful endeavor of their duty, are performing and have performed well and steadily their duty during all the time the proposed recipient of this special favor has been enjoying other honors and profits, and the ease and emoluments of civil life, and leisurely and luxurious amusement."

Mr. Brown, of Georgia: "It has been the usage of all great nations which have had great wars to render distinguished honors to the heroes of those wars. The judgment of mankind has approved it. Whether you call it hero-worship or whatever you may call it, the people of all civilized nations and of all savage nations do it. I do not profess to be entirely free from that principle which is sometimes called hero-worship. I do admire and entertain the very highest respect for the man who has shown himself a hero in war, because he exhibits high qualities that are worthy to be admired."

"If we Confederates had succeeded in the late civil war and it had been my fortune to-day to have stood in a Confederate Congress, that government having been established, and if the question had come before that Congress whether we should place Robert E. Lee or Joseph E. Johnston upon the retired list, had they occupied just the position that General Grant occupies to-day, I should not have hesitated one moment to vote that distinction to either with the attendant emoluments. Why? Because they were grand leaders; they were brave and magnanimous; they were powerful on the field; they were heroes, and because I should have held that they had rendered distinguished services to their country. In that case the bounds of the Confederacy would have been the boundary of my country, and they would have been the heroes of my country. The Confederates failed, however, and instead of the supposed case, I stand to-day as one of the representatives of a State in this Union in the Congress of the United States, and we having failed, and the Union having been restored, and we having returned to our allegiance to that Union, as I stand to-day, the heroes on the Union side become the heroes of my country, and it is my duty here to vote the same tribute and the same honor to them that I would have voted, in the case supposed, to Lee

or Johnston, had the Confederacy been established."

"Therefore, I shall vote in this case for the pending measure. Last year I voted against a resolution to place General Grant upon the army roll because, as I understood it then, it was very doubtful, if the measure had passed, whether he might not have been assigned to active duty, and whether there might not have arisen conflicts between him and the present General of the Army as to who should hold that position. General Grant having retired and gone into politics for the time, and having been honored by the people of the United States with two elections to the presidency, I would not vote to place him back upon the army list where he could return to active command and interfere with the present General of the Army; I think it would be unjust to do it. But this proposition comes distinctly before us in the shape of placing him on the retired list. In other words, it is asked by his friends that we do him the honor to put him back on the list of the army, where he so much distinguished himself and where he rendered such important service, and retire him with the common honors and the common pay that an officer of his rank thus retired receives. That meets my cordial assent. I believe it is proper to do it."

Mr. Call, of Florida: "Mr. President, this bill proposes an acknowledgment for distinguished public services rendered by an eminent citizen. The only two questions that are legitimate to the consideration of the bill are as to the character of the services and as to the form in which the public acknowledgment shall be made. Ordinarily these two divisions would comprehend the entire consideration of the subject, but there are circumstances outside of the subject of the bill which relate to the Senate as it is now constituted, which will influence my action, and which, I think, may very properly influence the action of other Senators here."

"We are here in part Senators from the States formerly engaged in resistance to the national authority, and in the larger part Senators from the States that maintained the national authority. The bill proposes a recognition of the military services of the leader of the armies that sustained the national authority, and it is proposed in this body by the Senators from those States that adhered to that authority. It is submitted to us, now restored to our constitutional relations to the Union, whether we shall say that they who maintained the authority of the Union shall now bestow upon the distinguished general of their armies such public reward and such recognition as to them and their people shall seem meet and proper."

"Sir, I maintain that, if there is no constitutional objection to the measure, if there is no important ground of public policy to require it, it would be ungracious, as well as unwise, in us to sit in disapproval and rebuke



upon the judgment of the people of the North as to the form, or the manner, or the extent in which they shall make that public recognition of the services of the leader of their armies. For that reason I shall not allow my judgment to be put in opposition to theirs; nor can I, upon an investigation of the subject, find any ground of constitutional objection or of public policy that would justify me in doing so. The whole extent of the question is, Shall a public acknowledgment by the Congress of the United States be made of military services which by the general verdict of the American people have been recognized as pre-eminent? Upon that question there can be no great difference of opinion. I shall vote for the bill, sir, and vote for it with pleasure."

Mr. Jonas, of Louisiana: "Mr. President, I have been sick and absent from my seat for several days, and had no intention of taking part in this debate. As it seems, however, that we will be called upon in a few moments to vote, I desire briefly to give the reasons why I can not vote for this bill, or for the amendment offered by the Senator from Delaware.

"While Senators from the South have been airing their Confederate reminiscences, and acknowledging their patriotic adhesion to this Government, which again and again they have adhered to, and to which they have again and again vowed allegiance, while they are making their new protestations, they seem to have forgotten the fact that sixteen years have passed since the war ended. They seem to have forgotten that there are no longer any sectional distinctions or divisions in this country. They seem, some of them, to have forgotten that they sit on this floor not as Southern Senators, or ex-Confederates, but as American Senators representing States in the Union.

"I was astonished a few moments ago to see my esteemed friend from Florida (Mr. Call) arise and to hear him, in the character of an ex-Confederate, say that he sat here for the purpose of doing that which the Senators of the North and the people of the North desire to have done. I acknowledge no such obligations and I acknowledge no such distinctions. This is an American Senate, and I represent in part one State of this Union, as the Senators from Northern States represent their States and their constituents, and I will be guided in the votes which I cast by my idea of my duty to my whole people instead of what I think it becomes me to do as an ex-sinner and ex-Confederate in order to atone for that sin which I committed twenty years ago by offering here in my place to execute the edict of the Northern members of this body, or what is supposed to be the will and pleasure of the Northern people. I do not think that this is the proper way in which this measure should be considered.

"I am not opposed to this bill simply because of its unusual character. I am not opposed to the bill simply because it proposes to

put a civilian on the retired list of the army. I am still less opposed to it because I would in the slightest degree detract from the great fame, the great renown, which has been conferred upon General Grant not only by the people of this country but by the people of the world, who have proclaimed him to be one of the greatest and most successful military commanders of modern days.

"I was an humble soldier in the Confederate army; but I have never revamped my recollections of secession, rebellion, and war, and brought them upon this floor. I have never alluded in words of criticism to anything which occurred during the war. I have said nothing and have nothing to say in condemnation of any military act committed during the war. I have stood ready here to give all honors, and all praise, and all glories to the heroes of the war. I have stood here ready to yield to no man in my devotion to the interests of the soldiers who fought against me. I have been willing to vote for their pensions; I have been willing to vote for their promotions; I have been willing to accede to all honors and to all glories which a grateful people, rightly in my opinion, have been disposed to shower upon them.

"But the proposed beneficiary of this bill, at a time when the people had placed him at the head of the army, when they had created the highest military office in the land for him to fill, when they had placed him in a position full of honor and full of emolument, which he could have occupied to his last days with the approbation and unanimous approval of the whole people of the country, North and South, thought fit to abdicate that position, and to enter upon the career of a civilian and a politician. Elected by his people to the highest office in the Government, honored equally with the Father of his Country, and equally with any of the best and greatest in our country's history, he retired from that position only because the people were faithful to their traditions, and considered that his measure of civic honor had been filled. I have not heard that he has lost fortune. If so, I stand here ready to assist in voting him a pension, in voting him money, in voting him anything which will aid in paying the debt which the nation owes him as a successful commander of her army, and probably as such her savior in her hour of peril. When, however, he comes here as a civilian, and when we are asked to place him upon the retired list of the army as a reward, not for his military services, because we rewarded them to our uttermost at the time he was a soldier, but to reward him as a civilian, I stand here as the representative of a people who have the right to challenge his acts as a civilian, and to ask in what he has earned their gratitude and in what he is entitled to their praise or further honor.

"Mr. President, I can not vote for General Grant, because as President in 1873, and in

1875, he subverted and destroyed the liberties of the people whom I represent upon this floor. I can not vote for General Grant, because when he was President in 1873 and the people of Louisiana were being deprived of their constitutional rights and privileges, and a government foreign to them and not elected by them was being installed over them by his order and by military force, they sent on to him a committee of two hundred of their best citizens, not politicians but citizens and tax-payers, men possessing an interest in the State as the representatives of property, and they telegraphed to him:

Please do not take any final action in the recognition of this government until we shall have a chance to lay our case before you—

"He responded to them through his Attorney-General:

It is useless for you to send two hundred thousand of your best citizens; they can not be heard; the case is adjudged; the Pinchback government is acknowledged, and it will be maintained.

"Am I to vote civic honors, am I to vote military honors, to the man who thus set his foot upon the liberties of my State, and was deaf to the appeal of her people to be heard?"

"Again, in 1875, when the Legislature of the State of Louisiana was assembled and organized, a belted officer, followed by his bayonets, entered the legislative chamber of the State and unseated the Speaker whom the members had elected, and dissolved that Legislature, which had organized, and this was done by the order and command of General Grant, President of the nation, and as such, acting Commander-in-Chief of the Army. Did this entitle him to the regard and support of my people; and for this shall he be rewarded?"

"No, Mr. President; for what he did in war, all honor; no one will accord it to him more cheerfully than I; but not for what he did in peace as a civilian (and I consider the bill before us now to confer reward as a civilian, he steps upon this ground as a civilian, he is to be crowned as a civilian, and as such he is to be promoted), I for one shall never consent by my vote to reward or approve such victories as he gained in Louisiana over republican institutions and the liberty of the people."

The question was taken on the amendment and it was rejected.

The bill was ordered to be engrossed for a third reading.

The bill was read the third time.

The President *pro tempore*: "The question is, Shall the bill pass?"

The roll-call having been concluded, the result was announced as follows:

YEAS—Allison, Anthony, Blair, Brown, Call, Cameron of Pennsylvania, Cameron of Wisconsin, Conger, Davis of Illinois, Davis of West Virginia, Dawes, Ferry, Frye, Harrison, Hawley, Hill of Colorado, Hoar, Ingalls, Jones of Florida, Jones of Nevada, Lapham, Logan, McDill, McMillan, Miller of California, Mitchell, Morrill, Platt, Ransom, Rollins, Saunders, Sawyer, Sherman, Teller, Windom—35.

NAYS—Bayard, Butler, Cockrell, Coke, Farley, Groome, Grover, Hampton, Harris, Jackson, Jonas, Maxey, Pendleton, Pugh, Slater, Vest, Walker—17.

ABSENT—Aldrich, Beck, Camden, Edmunds, Fair, Garland, George, Gorman, Hale, Hill of Georgia, Johnston, Kellogg, Lamar, McPherson, Mahone, Miller of New York, Morgan, Plumb, Saulsbury, Sewell, Vance, Van Wyck, Voorhees, Williams—24.

So the bill was passed.

In the House, on July 31st, the bill was referred to the Committee on Military Affairs.

CHINESE IMMIGRATION.—In the Senate, on March 1st, the bill to enforce treaty stipulations relating to the Chinese was taken up. A substitute was proposed and considered. Its important point was the limitation of Chinese immigration.

The Presiding Officer (Mr. Hoar in the chair): "The question is on the amendment of the Senator from Kansas (Mr. Ingalls) to the substitute reported by the Committee on Foreign Relations. Is the Senate ready for the question? The Chief Clerk will report the pending amendment."

The Acting Secretary: "In section 1, line 4, before the word 'years' it is proposed to strike out 'twenty' and insert 'ten,' so as to read '":

That from and after the expiration of sixty days next after the passage of this act, and until the expiration of ten years next after the passage of this act, the coming of Chinese laborers to the United States be, and the same is hereby, suspended.

The roll-call having been concluded, the result was announced: yeas 23, nays 23.

So the amendment to the amendment was rejected.

Mr. Hoar, of Massachusetts: "Mr. President, I do not wish to prolong this debate or to restate the argument which has, to my own satisfaction, demonstrated the enormity of the legislation which is proposed. The vote which has just been taken shows that it is the purpose of those having this bill in charge to force it through without regard to its effect upon the public faith of this Government, just pledged, by an act in which the Senate itself took its constitutional share, to the Empire of China.

"Such is the purpose of the framers of this bill, we having promised that we would not prohibit, but would only reasonably suspend the immigration of Chinese laborers to this continent, that promise having been accompanied with an express assurance given to China, reported to us by our envoys, that it was the purpose of this Government to use this power to adjust the balance of this class of labor in different parts of the country. When China asked for a more specific definition of this right of suspension, our commissioners said to China, 'You may trust in the justice and good faith of the Government of the United States.'

"In the face of that treaty and in the face of that contemporaneous promise reported to us before the treaty was ratified by the Senate,



it is now the purpose of a majority of this body to proceed to prohibit, not to suspend, but to proceed to do the one thing which we promised we would not do, and which our commissioners assured China might be left to the justice and good faith of the people of the United States."

Mr. Edmunds, of Vermont: "The bill does not provide that the subjects of the Emperor of China who are now in the United States lawfully shall go away; it does not provide that any person who is within our borders shall do or suffer anything whatever; but it simply provides, with the consent of the Government of China (which has a right to be a government of some kind or other, I suppose), that a certain class of the subjects of that empire shall not come into our community for a certain period of years.

"That is the proposition; and like every other such proposition, whether you go into the moral law about crimes or not, it is a question that depends upon the just judgment (and that every man must judge about for himself), the policy of the community, the State, or the nation. It has always been so; it always must be so until every government is broken down, as the Nihilists propose to break down the Government of Russia—and I wish it were broken down as it is now organized, not by such wicked means, but by such just means as our forefathers broke down the government of the King of Great Britain in this country—but it must depend always upon what the people organized into a community think it is fit to do.

"My learned friend says that that is not a sound proposition. He says that homogeneity is not, according to the historic experience of civilized peoples, necessary to the success of a republic, and he says that the Greek republics did not have a homogeneous population. So they did not; and where are the Greek republics now? How long did they last, and what caused their fall? Exactly that thing, that they did not possess that quality in most of the instances of the Greek republics, and away they went.

"My honorable friend says that the Swiss Republic is not homogeneous. I deny it. The difference in language, the difference, not in race (for there is no difference in race in the Swiss Republic), but the difference in varieties of the same race that are analogous, that are consistent with each other, does exist, and they get on. Does my honorable friend think that it is an advantage to a republic that its citizens should be made up of diverse races, of diverse views, of diverse obligations, of diverse opinions as to what the common prosperity of all requires? He can not say so. I am sure he will not. Therefore, why is it that we are so continually reminded by my honorable friend and others that we are violating the principles of the foundation of republican governments in undertaking to say this simple thing? I am

not speaking of the way we are saying it at this moment, but the principle that lies at the bottom of this bill and which surrounds it on every side, as to the right of the people of the United States, consistently with the moral law, with the law of Christianity, and with the law of nations, to make a regulation as to the reception of foreigners into the body of our Commonwealths. That is the proposition. My honorable friend has not denied what I stated yesterday, that every book upon natural law or public law that I have had the pleasure of reading asserts what I have asserted.

"I repeat what I stated yesterday, that so long as you are to have government at all, that government, like a family or a partnership, must be the judge for itself as to what persons it will take into the body of the people, that at the last in our form of government constitute the Government itself. It has always been so; it always will be so as long as governments last. You can not have a government without it; you never have had one without it.

"So, then, we stand; and these Chinamen having a right to come here under the Burlingame treaty, and it being thought, wisely or unwisely, with prejudice or without, that their coming in the numbers and in the way and of the character that they did was injurious to the interests of the United States, it was provided by another treaty that the old treaty should be abrogated, and that the United States should be remitted to its original natural right as a government of determining as to a certain part of these Chinese people, named, specified, and described, whether they should come or not within a reasonable period of time, in order to test the question by the experiment as far as we had it already. Where is the harm in that upon the widest principles of fair play, upon the widest humanity, unless you say that there is nothing in the nature of a government which entitles one people to be the judges for themselves of whom they shall take in? I say that to maintain that doctrine is to maintain a proposition that is contrary to all human experience, is contrary to all human discussion almost, until within a very short period, and is contrary to every step that our fathers from their Declaration of Independence to this day have declared. There is now upon your statute-book a law which condemns the cooly trade, as it is called, and punishes it by penalties more severe, I think—I have not looked at it lately—than the penalties of this bill, and which puts, on the argument of the Senator from Massachusetts, the seal of its unjust condemnation upon the man who is a servant. We may, therefore, if that law be one that can stand, say that a man shall not be brought into this country, or in an American vessel carried to any other, who is under any contract to serve another man as a servant; but we may not say that he shall not come into our country in his character as a mere laborer for ten years or twenty years, as the case may be?

How can you distinguish? And yet, I believe—I am not sure that I am right about that—that this cooly bill came from the magnanimous heart and the large brain of the predecessor of my honorable friend from Massachusetts, Sumner, the advocate of human rights as his successor is, and as I hope I and my colleague would be in our humble and more simple way. I think it came from him. I remember once certainly that he introduced a bill into this body to improve that act which I think he was the author of in the first place, and which declared, if I remember it correctly, that the penalties of the law should be imposed upon any master of an American vessel that carries a Chinaman who is a servant—it does not say ‘laborer,’ but ‘servant’—anywhere on the face of the globe to be a servant for any man. Of course that does not prove that that law is right, but it seems to prove that it was thought by somebody before us to-day that it was a part of the just mission of every government to be entitled to have an opinion, and to enforce it upon such subjects.

“That is what seems to me to be the state of this case, sir, and while I shall feel compelled to vote against this bill if the twenty years’ clause is retained, and I shall earnestly hope that it will never become a law, it will not be because I do not believe in the right of the Government of the United States to determine as to everybody, upon any ground that seems good to itself, what persons from abroad shall form a part of our political communities, and compose a part of the people of the United States.”

Mr. Hoar: “Mr. President, I wish only to say a word. The honorable Senator from Vermont challenged me to produce from the writers on public law any who affirmed the obligation of a people to receive persons from any other nation whom they thought fit to exclude. The Senator from Vermont knows very well that all the writers on public law, with scarcely an exception, deny altogether the American doctrine of expatriation, and the same authorities which affirm the right of the people to exclude affirm the right of the sovereign from whom the subject wishes to depart to retain. The American doctrine is different. The American doctrine affirms, as the Declaration of Independence affirms and as the New Testament affirms, as I read it—two authorities which lie at the very foundation of all law, domestic, international, individual, which governs mankind—that the right is equal, that the human being has the right, conforming to law, conforming to the proper regulations of the place to which he goes, to go and seek his fortune, and to earn his living by honest labor.

“The Senator seems to me, when he alludes to the right of Congress to pass laws providing for naturalization, to confound two very distinct things. We may undoubtedly regulate the conditions upon which the citizens of a foreign country shall be admitted to citizen-

ship here; we may undoubtedly establish rules or fix a period of time which will make it certain that that citizen of a foreign country has renounced his old allegiance, and has acquired sufficient knowledge of and respect for our institutions to make a good citizen, just as we, the legislative power, properly fix the age of twenty-one or twenty-five, or what other age the experience of mankind dictates, at which the native may exert the one great privilege of citizenship, that of voting. But would the Senator argue from the right of the legislative power to fix twenty-one years as the earliest age at which a person may exercise the privilege of a voter the power to deny or to deny any particular race the right to vote altogether?

“The Declaration of Independence and the Constitution are full of implied affirmations of the truth of the doctrine upon which I stand. Among the charges against the monarch of Great Britain which justified the separation was the fact that although our fathers recognized his rightful share of legislative power over the colonies and never before denied it, they charged as one of the great abuses which justified the separation that—

He has endeavored to prevent the population of these States; for that purpose obstructing the laws for naturalization of foreigners; refusing to pass others to encourage their migration hither, and raising the conditions of new appropriations of lands.

“The Constitution itself assumes that the naturalization of persons of other communities will be unrestricted except within the reasonable limit which I have stated, and provides that Congress shall pass laws for the naturalization of foreigners which shall be uniform, not which shall distinguish between races and between nationalities. The fourteenth amendment, in the adoption of which I suppose the honorable Senator from Vermont himself bore a conspicuous part, as he does in all legislation here, provides that every person born in the United States becomes from that fact a citizen thereof. The children of any of the Chinese laborers now in California become citizens by the affirmation in the Constitution itself of the natural fitness of all men for republican life and their natural equality without regard to race.

All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside.

“There is citizenship by birthright, without regard to race or color or nationality. Then the fifteenth amendment supplements it by the provision that this citizenship which is a birthright shall carry with it the right of citizens to vote, or that that right ‘shall not be denied or abridged by the United States, or by any State, on account of race, color, or previous condition of servitude.’

“So that this legislation is not only in violation of the treaty, not only in violation of the solemn affirmation of Congress that the right



of expatriation carries with it the right of citizenship of the country where a man goes, but it is equally in violation of the Declaration of Independence and the spirit of the Constitution of the United States.

"Mr. President, it requires no deduction even from the statement of the honorable Senator from Vermont but only his application to see that his argument involves the right to exclude from this country all the naturalized citizens if Congress sees fit to exercise it. If you may shut the door, you may put outside the person who is here contrary to the interest of the people and without right. Will the honorable Senator from Vermont affirm that if that reconsideration of the relation of the African race to citizenship, which the Senator from Mississippi seems to foreshadow, should ever come, we may rightfully, consistently with the doctrine of the Declaration of Independence, expel persons of the African race from this country and deport them to Liberia?"

Mr. Edmunds: "Mr. President, the principle upon which we say in regard to the right to vote that no male citizen shall vote until he is twenty-one years of age if you please, is that it belongs to the body of the people who compose the Government to say how political power shall be exercised. Otherwise the people would have no right at all to say that a man of twenty-one should vote; they would have no right to say anything about it. He had got the natural right at the very moment he was born to vote, at least once; I will not say how much more often. That doctrine will not stand, Mr. President."

Mr. Hoar: "May I ask the honorable Senator if he means to affirm that the right in a body-politic to fix twenty-one years or some other limit for coming to the right to vote in its discretion, involves the power to limit altogether the coming to that right to vote of certain races or classes, if it sees fit?"

Mr. Edmunds: "I am not speaking of races at all."

Mr. Hoar: "Classes, then."

Mr. Edmunds: "I am speaking on this bill of human beings who are not members now of the political community of the United States and who wish to become such, as it is said by my friend from Massachusetts, and that we are perpetrating a great wrong upon them in saying that we are not willing just now that they shall. That is what I am speaking of."

Mr. Hoar: "If the Senator will pardon me—I ought to ask his pardon for interrupting him—the Senator took as an illustration of the power the right to fix twenty-one years or some other time as the age for voting, and I desire to understand if he infers from the fact that the public has that right, that it has the right to exclude altogether any class of citizens in the community from voting, because, as I understood, he argued from the right to limit the period of naturalization of foreigners the

right to exclude them altogether. Now, I say those are very different things."

Mr. Edmunds: "If I did argue, as I did, from the acknowledged right, as I think it is now admitted even by the Senator from Massachusetts, of the Government of the United States to fix a period for the naturalization of foreigners, I deduce from that the right of the United States to fix that period at ten thousand years if the United States think it is well for the people of the United States to do that thing, and I say also that under the Declaration of Independence and the Constitution of the United States, which I still believe in, it is within the competence of Congress, as it has exercised it, always to decide upon receiving into this country as one of its people anybody, to require a test of opinion, as extreme as that may be, because the first naturalization law and the last naturalization law all the time requires that a candidate for admission into the body of the people of this country shall have certain opinions that that law defines. These opinions are required to be, very wisely I think, republican, that they shall believe in republican government as against the domination of emperors and kings.

"Where do we get the right to test the admission of anybody into this country on the ground of his opinions? We get it, if we get it at all—and I am quite clear that we have it—on the fundamental principle I have endeavored so often to state, and which my friend from Massachusetts, I do not understand except by the course of his argument plainly to deny, that it is the right of every government, if it be a government, to determine what persons shall come into it from outside of it and be a part of it. If we have not that right, then we have not any right to make a naturalization law at all; then the moment any foreigner, be he good or bad, be he a saint or a sinner, sets his foot upon the shores of this American Republic, he has the same rights in every respect that the Senator from Massachusetts and I have. I deny the proposition. All civilized laws everywhere in the whole course of history have denied it, because they have recognized that it was essential to the existence of a government, if you had any government at all, that that government, like a family or a partnership, must receive into it only those persons whom it was willing to receive. It was a compact that required the assent of the whole, not of one party but of both.

"Mr. President, there is one other thing that I disagree with my friend from Massachusetts about, and perhaps that is of no importance to anybody but my friend from Massachusetts and myself; and that is the New Testament. My friend says that it is the doctrine of the New Testament that it is the right of every man to go everywhere, and to participate with all others in everything that they enjoy, if I correctly understand him. I deny it. By the New Testament, as it is understood in this

country, and has been ever since it was founded, in all of its churches, Republican churches, and I will say Democratic churches, the Congregational churches that prevail in New England more than any other, the member of one church constituting that one religious family analogous to a political family who undertakes to leave the church that he belongs to and go to another has not even the right of expatriation; he must get a letter of credence, and having got it he must submit it to the will of the church that he desires fellowship with, and get the vote of that church to admit him. That is the New Testament as it is understood in Vermont, and I think rightly, and it rests upon that infinite and persistent common sense that all human history has proved to be wisest and best, that every people and every church, every little community in regard to its own particular affairs must decide what persons other than itself are to be received into it, and become a part of it. And I think at this day that the Constitution of Massachusetts itself undertakes, through the political opinions of those who are voters there and their political action, to settle not only the age as to voting but the quality and condition of the man who shall vote, that he must possess certain qualities that he can not outgrow by the mere lapse of time, that he must be in a particular condition of worldly estate; he must not be a pauper, that he must be in a particular condition of mind, he must not be what the majority of the people consider to be insane; that he must not have been convicted of some crime, that he must possess this, that, and the other quality. Where did the people of Massachusetts get the right to impose any such conditions upon a human being? Any one coming there has a right to judge as well as they, is the argument of my friend from Massachusetts, but that gives away the whole case of every government and turns the whole world into one hotch-potch; and the ladies and gentlemen in the galleries, on that doctrine, have got the same right to come down here and vote and discuss that we have, because when we set up an arbitrary exclusion and say nobody shall come in here and argue and talk and vote, unless he has the certificate of some State or something of that kind, what are you going to do with human rights in a case of that kind? The argument goes to the destruction of all order and government from the top to the bottom.

"Sir, in what I have said I do not wish to be understood as saying that this bill in regard to the condition of affairs is politic or impolitic. That is not the question. I only undertook to defend the right of the people of the United States to determine for themselves according to their own honest judgment of their own interests, consistent with justice to others, who shall enter into their borders, who shall compose a part of their people. That is all."

Mr. Torrey of Colorado: "As I understand the Senators from Massachusetts, who seem

to be the principal opponents of this bill on this floor, take the position that the bill is contrary to equity, a violation of fundamental principles, a violation of the rights of man that are recognized in the Declaration of Independence and that have been recognized by the Republican party in its history always. Mr. President, if that is true, I should feel very loath myself to vote for it unless the evils were of such magnitude as to render it necessary that I should, in the language of the country, go back upon my record. I am like the Senator from Kansas; I do not yield in my devotion to these principles to anybody. The belief in the right of all men to labor and eat the bread they have earned by their labor is not a new-born thing with me, But I do not understand that any such thing exists. I understand that this is a right which is recognized by every nation in the world, and by everybody in the world almost, unless it may be the Senators from Massachusetts, a right that was recognized in the Constitution of Massachusetts in 1780, when they declared in so many words for this kind of legislation. I have it right here, and I will call the attention of the Senate to it:

The end of the institution, maintenance, and administration of government is to secure the existence of the body-politic, to protect it, and to furnish the individuals who compose it with the power of enjoying, in safety and tranquillity, their natural rights and the blessings of life; and whenever these great objects are not obtained the people have a right to alter the government, and to take measures necessary for their safety, prosperity, and happiness.

"That has been the doctrine of all liberal-minded men everywhere at all times. There have been, I will admit, a few people who have risen to the dignity of writing upon this question, who have occasionally asserted, as was said here the other day, that the human race is one family, and that the same obligations on the part of the Government of this country exist toward the people of any other country that exist with reference to its own citizens; but they are numerically so small and so insignificant that they have never impressed those ideas upon the body-politic of any nation in the world. It can not be, Mr. President, that one nation will legislate for the interest of all mankind. They will legislate for the interest of their own people first, and that is what they ought to do.

"In 1880 the Republican party assembled in convention at Chicago, a convention composed of the leading minds of the Republican party. Presiding over that convention was the Senator from Massachusetts (Mr. Hoar), and we appointed at that convention our representative men on a committee to go out and bring back a declaration of our principles. We expected to promulgate those principles and go to the people and demand their suffrage, and we declared in our platform for this kind of legislation and we pledged ourselves to work for this kind of legislation. Did the Senator



from Massachusetts rise in his seat then and answer and say, 'Why, this is contrary to the fundamental principles of the Declaration of Independence; this is a violation of the rights of humanity, and it ought not to be done?' The candidate nominated by that convention published to the world his letter of acceptance, in which he not only accepted the doctrines laid down in the platform *en masse*, but proceeded to speak on this very question and to put himself on record in favor of the right of the Government, its legal right, its moral right, to restrict this class of immigration; and it does not come with a right good grace that the two Senators from Massachusetts should now assume all the virtue in the Republican party, and accuse everybody else who differs with them on this subject of being moved by hate, as the honorable Senator who addressed the Senate yesterday (Mr. Dawes) declared we all were."

The President *pro tempore*: "Does the Senator from Kansas withdraw the whole of his amendment, including the words which he moved to insert?"

Mr. Ingalls: "Yes, sir."

The President *pro tempore*: "The question is on the amendment as modified, substituting ninety days for sixty days."

The amendment to the amendment was agreed to—yeas, 26; nays not counted.

The President *pro tempore*: "The roll will be called on the passage of the bill."

The result was announced—yeas 29, nays 15; as follows:

YEAS—Bayard, Beck, Call, Cameron of Wisconsin, Cockrell, Coke, Fair, Farley, Garland, George, Gorman, Hale, Harris, Hill of Colorado, Jackson, Jonas, Jones of Nevada, Miller of California, Miller of New York, Morgan, Pugh, Ransom, Sawyer, Slater, Teller, Vance, Vest, Voorhees, Walker—29.

NAYS—Aldrich, Allison, Blair, Brown, Conger, Davis of Illinois, Dawes, Edmunds, Frye, Hoar, Ingalls, Lapham, McDill, McMillan, Morrill—15.

ABSENT—Anthony, Butler, Camden, Cameron of Pennsylvania, Davis of West Virginia, Ferry, Groome, Grover, Hampton, Harrison, Hawley, Hill of Georgia, Johnston, Jones of Florida, Kellogg, Lamar, Logan, McPherson, Mahone, Maxey, Mitchell, Pendleton, Platt, Plumb, Rollins, Sainsbury, Saunders, Sewell, Sherman, Van Wyck, Williams, Windom—32.

So the bill was passed.

In the House, on March 23d, the bill was passed by the following vote:

YEAS—Aiken, Aldrich, Armfield, Atkins, Bayne, Belford, Belmont, Berry, Bingham, Blackburn, Blanchard, Bliss, Blount, Brewer, Brumm, Buckner, Joseph H. Burrows, Butterworth, Cabell, Caldwell, Calkins, Campbell, Cannon, Cassidy, Caswell, Chalmers, Chapman, Clark, Clements, Cobb, Converse, Cook, Cornell, Samuel S. Cox, William R. Cox, Covington, Cravens, Culberson, Curtin, Darrell, Davidson, George R. Davis, Lowndes H. Davis, De Motte, Deuster, Dezendorf, Dibble, Dibrell, Dowd, Dugro, Ermentrout, Errett, Charles B. Farwell, Finley, Flower, Ford, Forney, Fulkerson, Garrison, Geddes, George, Gibson, Guenther, Gunter, N. J. Hammond, Hardy, Harner, Henry S. Harris, Haseltine, Hatch, Hazelton, Heilmann, Herndon, Abram S. Hewitt, Hill, Hiseock, Hoblitzell, Hoge, Holman, Horr, Houk,

House, Hubbell, Hubbs, Hutchins, George W. Jones, James K. Jones, Jorgensen, Kenna, King, Klotz, Knott, Ladd, Leedom, Lewis, Marsh, Martin, Matson, McClure, McCook, McKenzie, McKinley, McLane, McMillin, Miller, Mills, Money, Morey, Moulton, Murch, Mutchler, O'Neill, Pacheco, Page, Paul, Payson, Peelle, Phelps, Phister, Pound, Randall, Reagan, Theron M. Rice, John S. Richardson, Robertson, William E. Robinson, Rosecrans, Scranton, Shallenberger, Sherwin, Simonton, Otho R. Singleton, A. Herr Smith, Dietrich C. Smith, J. Hyatt Smith, Sparks, Spaulding, Speer, Springer, Stockslager, Strait, Talbott, Thomas, P. B. Thompson, Tillman, Amos Townsend, R. W. Townsend, Tucker, Henry G. Turner, Oscar Turner, J. T. Updegraff, Upson, Valentine, Vance, Van Horn, Warner, Washburn, Webber, Wellborn, Whitthorne, Thomas Williams, Willis, Willitts, Wilson, George D. Wise, Morgan R. Wise, Walter A. Wood—167.

NAYS—Anderson, Barr, Bragg, Briggs, Browne, Buck, Camp, Candler, Carpenter, Chace, Crapo, Cullen, Dawes, Deering, Dingley, Dunnell, Dwight, Sewell S. Farwell, Grout, Hall, John Hammond, Hardenbergh, Benjamin W. Harris, Haskell, Hawk, Henderson, Hepburn, Hooker, Humphrey, Jacobs, Phineas Jones, Joyce, Kasson, Ketcham, Lord, McCoid, Morse, Norcross, Orth, Parker, Ranney, Reed, John B. Rice, William W. Rice, Rich, D. P. Richardson, Ritchie, George D. Robinson, Russell, Ryan, Shultz, Skinner, Spooner, Stone, Taylor, William G. Thompson, Tyler, Thomas Updegraff, Urner, Wadsworth, Wait, Walker, Ward, Watson, White, Charles G. Williams—66.

NOT VOTING—Allen, Atherton, Barbour, Beach, Beltzhoover, Black, Bland, Bowman, Buchanan, Julius C. Burrows, Carlisle, Clardy, Colerick, Crowley, Cutts, Dunn, Ellis, Evins, Fisher, Frost, Godshalk, Herbert, G. W. Hewitt, Jadwin, Kelley, Lacey, Latham, Le Fevre, Lindsey, Manning, Mason, Miles, Moore, Morrison, Mosgrove, Muldrow, Neal, Nolan, Oates, Pierce, Pettibone, Prescott, Ray, Robeson, James S. Robinson, Ross, Scales, Seville, Shackelford, Shelley, James W. Singleton, Steele, Stephens, Van Aernam, Van Voorhis, West, Wheeler, Benjamin Wood, Young—59.

On April 4th President Arthur returned the bill to the Senate, with his objections to it, as follows:

*To the Senate of the United States:*

After careful consideration of Senate bill No. 71, entitled "An act to execute certain treaty stipulations relating to Chinese," I herewith return it to the Senate, in which it originated, with my objections to its passage.

A nation is justified in repudiating its treaty obligations only when they are in conflict with great paramount interests. Even then all possible reasonable means for modifying or changing those obligations by mutual agreement should be exhausted before resorting to the supreme right of refusal to comply with them.

These rules have governed the United States in their past intercourse with other powers as one of the family of nations. I am persuaded that if Congress can feel that this act violates the faith of the nation as pledged to China, it will concur with me in rejecting this particular mode of regulating Chinese immigration, and will endeavor to find another which shall meet the expectations of the people of the United States without coming in conflict with the rights of China.

The present treaty relations between that power and the United States spring from an antagonism which arose between our paramount domestic interests and our previous relations.

The treaty commonly known as the Burlingame treaty conferred upon Chinese subjects the right of voluntary emigration to the United States for the purposes of curiosity or trade, or as permanent residents,



and was in all respects reciprocal as to citizens of the United States in China. It gave to the voluntary emigrant coming to the United States the right to travel there or to reside there, with all the privileges, immunities, or exemptions enjoyed by the citizens or subjects of the most favored nation.

Under the operation of this treaty it was found that the institutions of the United States and the character of its people and their means of obtaining a livelihood might be seriously affected by the unrestricted introduction of Chinese labor. Congress attempted to alleviate this condition by legislation, but the act which it passed proved to be in violation of our treaty obligations, and, being returned by the President with his objections, failed to become a law.

Diplomatic relief was then sought. A new treaty was concluded with China. Without abrogating the Burlingame treaty, it was agreed to modify it so far that the Government of the United States might regulate, limit, or suspend the coming of Chinese laborers to the United States or their residence therein, but that it should not absolutely prohibit them, and that the limitation or suspension should be reasonable and should apply only to Chinese who might go to the United States as laborers, other classes not being included in the limitations. This treaty is unilateral, not reciprocal. It is a concession from China to the United States in limitation of the rights which she was enjoying under the Burlingame treaty. It leaves us by our own act to determine when and how we will enforce those limitations. China may, therefore, fairly have a right to expect that in enforcing them we will take good care not to overstep the grant, and take more than has been conceded to us.

It is but a year since this new treaty, under the operation of the Constitution, became part of the supreme law of the land; and the present act is the first attempt to exercise the more enlarged powers which it relinquishes to the United States.

In its first article the United States is empowered to decide whether the coming of Chinese laborers to the United States, or their residence therein, affects or threatens to affect our interests, or to endanger good order either within the whole country or in any part of it. The act recites that, "in the opinion of the Government of the United States, the coming of Chinese laborers to this country endangers the good order of certain localities thereof." But the act itself is much broader than the recital. It acts upon residence as well as immigration, and its provisions are effective throughout the United States. I think it may fairly be accepted as an expression of the opinion of Congress that the coming of such laborers to the United States, or their residence here, affects our interests and endangers good order throughout the country. On this point I should feel it my duty to accept the views of Congress.

The first article further confers the power upon this Government to regulate, limit, or suspend, but not actually to prohibit the coming of such laborers to, or their residence in, the United States. The negotiators of the treaty have recorded with unusual fullness their understanding of the sense and meaning with which these words were used.

As to the class of persons to be affected by the treaty, the Americans inserted in their draft a provision that the words "Chinese laborers" signify all immigration other than that for "teaching, trade, travel, study, and curiosity." The Chinese objected to this that it operated to include artisans in the class of laborers whose immigration might be forbidden. The Americans replied that they "could" not consent that artisans shall be excluded from the class of Chinese laborers, for it is this very competition of skilled labor, in the cities where the Chinese labor immigration concentrates, which has caused the embarrassment and popular discontent. In the subsequent negotiations this definition dropped out, and does not appear in the treaty. Article II of the treaty confers the rights, privileges, immunities, and exemptions which are accorded to citizens and subjects of

the most favored nation upon Chinese subjects proceeding to the United States as teachers, students, merchants, or from curiosity. The American commissioners report that the Chinese Government claimed that in this article they did, by exclusion, provide that nobody should be entitled to claim the benefit of the general provisions of the Burlingame treaty but those who might go to the United States in those capacities or for those purposes. I accept this as the definition of the word "laborers" as used in the treaty.

As to the power of legislating respecting this class of persons, the new treaty provides that we "may not absolutely prohibit" their coming or their residence. The Chinese commissioners gave notice in the outset that they would never agree to prohibition of voluntary emigration. Notwithstanding this the United States commissioners submitted a draft in which it was provided that the United States might "regulate, limit, suspend, or prohibit" it. The Chinese refused to accept this. The Americans replied that they were "willing to consult the wishes of the Chinese Government in preserving the principle of free intercourse between the people of the two countries, as established by existing treaties, provided that the right of the United States Government to use its discretion in guarding against any possible evils of immigration of Chinese laborers is distinctly recognized. Therefore, if such concession removes all difficulty on the part of the Chinese commissioners (but only in that case), the United States commissioners will agree to remove the word "prohibit" from their article, and to use the words "regulate, limit, or suspend." The Chinese reply to this can only be inferred from the fact that in the place of an agreement, as proposed by our commissioners, that we might prohibit the coming or residence of Chinese laborers, there was inserted in the treaty an agreement that we might not do it.

The remaining words, "regulate, limit, and suspend," first appear in the American draft. When it was submitted to the Chinese they said: "We infer that of the phrases regulate, limit, suspend, or prohibit, the first is a general expression referring to the others. We are entirely ready to negotiate with your excellencies to the end that a limitation either in point of time or of numbers may be fixed upon the emigration of Chinese laborers to the United States." At a subsequent interview they said that "by limitation in number they meant, for example, that the United States having, as they supposed, a record of the number of immigrants in each year, as well as the total number of Chinese now there, that no more should be allowed to go in any one year in future than either the greatest number which had gone in any year in the past, or that the total number should never be allowed to exceed the number now there. As to limitation of time they meant, for example, that Chinese should be allowed to go in alternate years, or every third year, or, for example, that they should not be allowed to go for two, three, or five years." At a subsequent conference the Americans said: "The Chinese commissioners have in their project explicitly recognized the right of the United States to use some discretion, and have proposed a limitation as to time and number. This is the right to regulate, limit, or suspend."

In one of the conferences the Chinese asked the Americans whether they could give them any idea of the laws which would be passed to carry the powers into execution. The Americans answered that this could hardly be done; that "the United States Government might never deem it necessary to exercise this power. It would depend upon circumstances. If Chinese immigration concentrated in cities where it threatened public order, or if it confined itself to localities where it was an injury to the interests of the American people, the Government of the United States would undoubtedly take steps to prevent such accumulations of Chinese. If, on the contrary, there was no large immigration, or if there were sections of the country where such immigration was clearly



beneficial, then the legislation of the United States, under this power, would be adapted to such circumstances. For example, there might be a demand for Chinese labor in the South and a surplus of such labor in California, and Congress might legislate in accordance with these facts. In general, the legislation would be in view of and depend upon the circumstances of the situation at the moment such legislation became necessary." The Chinese commissioners said this explanation was satisfactory; that they had not intended to ask for a draft of any special act, but for some general idea how the power would be exercised. What had just been said gave them the explanation which they wanted.

With this entire accord as to the meaning of the words they were about to employ, and the object of the legislation which might be had in consequence, the parties signed the treaty, in Article I of which "the Government of China agrees that the Government of the United States may regulate, limit, or suspend such coming or residence, but may not absolutely prohibit it. The limitation or suspension shall be reasonable, and shall apply only to Chinese who may go to the United States as laborers, other classes not being included in the limitations. Legislation taken in regard to Chinese laborers will be of such a character only as is necessary to enforce the regulation, limitation, or suspension of immigration."

The first section of the act provides that "from and after the expiration of sixty days next after the passage of this act, and until the expiration of twenty years next after the passage of this act, the coming of Chinese laborers be, and the same is hereby, suspended, and during such suspension it shall not be lawful for any Chinese laborer to come, or having so come after the expiration of said sixty days, to remain within the United States."

The examination which I have made of the treaty, and of the declarations which its negotiators have left on record of the meaning of its language, leaves no doubt in my mind that neither contracting party in concluding the treaty of 1880 contemplated the passage of an act prohibiting immigration for twenty years, which is nearly a generation, or thought that such a period would be a reasonable suspension or limitation, or intended to change the provisions of the Burlingame treaty to that extent. I regard this provision of the act as a breach of our national faith; and being unable to bring myself in harmony with the views of Congress on this vital point, the honor of the country constrains me to return the act with this objection to its passage.

Deeply convinced of the necessity of some legislation on this subject, and concurring fully with Congress in many of the objects which are sought to be accomplished, I avail myself of the opportunity to point out some other features of the present act which, in my opinion, can be modified to advantage.

The classes of Chinese who still enjoy the protection of the Burlingame treaty are entitled to the privileges, immunities, and exemptions accorded to citizens and subjects of the most favored nation. We have treaties with many powers which permit their citizens and subjects to reside within the United States and carry on business under the same laws and regulations which are enforced against citizens of the United States. I think it may be doubted whether provisions requiring personal registration and the taking out of passports which are not imposed upon natives can be required of Chinese. Without expressing an opinion on that point, I may invite the attention of Congress to the fact that the system of personal registration and passports is undemocratic and hostile to the spirit of our institutions. I doubt the wisdom of putting an entering-wedge of this kind into our laws. A nation like the United States, jealous of the liberties of its citizens, may well hesitate before it incorporates into its polity a system which is fast disappearing in Europe before the progress of liberal institutions. A wide experience has shown how futile such precautions are, and how easily passports

may be borrowed, exchanged, or even forged by persons interested to do so.

If it is nevertheless thought that a passport is the most convenient way for identifying the Chinese entitled to the protection of the Burlingame treaty, it may still be doubted whether they ought to be required to register. It is certainly our duty under the Burlingame treaty to make their stay in the United States, in the operation of general laws upon them, as nearly like that of our own citizens as we can consistently with our right to shut out the laborers. No good purpose is served in requiring them to register.

My attention has been called by the Chinese minister to the fact that the bill as it stands makes no provision for the transit across the United States of Chinese subjects now residing in foreign countries. I think that this point may well claim the attention of Congress in legislating on this subject.

I have said that good faith requires us to suspend the immigration of Chinese laborers for a less period than twenty years; I now add that good policy points in the same direction.

Our intercourse with China is of recent date. Our first treaty with that power is not yet forty years old. It is only since we acquired California and established a great seat of commerce on the Pacific that we may be said to have broken down the barriers which fenced in that ancient monarchy. The Burlingame treaty naturally followed. Under the spirit which inspired it many thousand Chinese laborers came to the United States. No one can say that the country has not profited by their work. They were largely instrumental in constructing the railways which connect the Atlantic with the Pacific. The States of the Pacific slope are full of evidences of their industry. Enterprises profitable alike to the capitalist and to the laborer of Caucasian origin would have lain dormant but for them. A time has now come when it is supposed that they are not needed, and when it is thought by Congress and by those most acquainted with the subject that it is best to try to get along without them. There may, however, be other sections of the country where this species of labor may be advantageously employed without interfering with the laborers of our own race. In making the proposed experiment, it may be the part of wisdom as well as of good faith to fix the length of the experimental period with reference to this fact.

Experience has shown that the trade of the East is the key to national wealth and influence. The opening of China to the commerce of the whole world has benefited no section of it more than the States of our own Pacific slope. The State of California, and its great maritime port especially, have reaped enormous advantages from this source. Blessed with an exceptional climate, enjoying an unrivaled harbor, with the riches of a great agricultural and mining State in its rear, and the wealth of the whole Union pouring into it over its lines of railway, San Francisco has before it an incalculable future if our friendly and amicable relations with Asia remain undisturbed. It needs no argument to show that the policy which we now propose to adopt must have a direct tendency to repel Oriental nations from us, and to drive their trade and commerce into more friendly lands. It may be that the great and paramount interest of protecting our labor from Asiatic competition may justify us in a permanent adoption of this policy. But it is wiser, in the first place, to make a shorter experiment, with a view hereafter of maintaining permanently only such features as time and experience may command.

I transmit herewith copies of the papers relating to the recent treaty with China which accompanied the confidential message of President Hayes to the Senate of the 10th of January, 1881, and also a copy of a memorandum respecting the act herewith returned, which was handed to the Secretary of State by the Chinese minister in Washington.

CHESTER A. ARTHUR.

EXECUTIVE MANSION, WASHINGTON, April 4, 1882.



The bill, upon being reconsidered with the President's objections by the Senate, on April 5th, failed to pass.

Subsequently, on April 17th, a bill "to execute certain treaty stipulations relating to the Chinese" was reported from the Committee on Education in the House.

Mr. Bragg, of Wisconsin: "I desire to know how and why, under the rules of this House, a bill entitled a bill to execute certain treaty stipulations, prescribing intercourse between this Government and a foreign nation, making regulations concerning immigration, and affecting the naturalization laws, comes from the Committee on Education and Labor."

The Speaker: "Because the subject was referred to that committee."

Mr. Willis, of Kentucky: "Mr. Speaker, I intend to vote for this bill; and I hope every one who voted for the vetoed bill will vote for this bill. But, sir, I reserved to myself the right in committee, and I exercise that right now, to utter my solemn protest against the action of the committee in placing before us a bill which makes a hasty and unnecessary if not a cowardly surrender of all our rights both under this treaty and under natural and constitutional law."

"I object to the bill not only on account of the absence of the penalty clause, but because the whole system of registration is cut out. Every bill on this subject that has been thus far presented to Congress has recognized the necessity for some system of registration. Without such a system it will be as difficult to know and to protect the 105,000 Chinese now here as it will be impossible to prevent the unlawful coming and residence of those who are now in China. You first strike out the penalty by which Chinamen are punished for coming here unlawfully, and then you cut out the provision for registration, thus rendering it utterly impossible to distinguish or identify the lawful from the unlawful residents. Could the door for Chinese immigration be more widely and safely opened?"

"But, sir, the last and the principal objection which we, the minority of the committee, urge against this bill is the ten-year clause. For over twenty-five years the Pacific States have been cursed with the evils of Chinese immigration; the peace and order of society have been disturbed; the interests of good government jeopardized; the rights and comforts of honorable labor have been overthrown, and its worthy representatives driven into poverty and exile by an invading race, self-determined upon alien, sordid, and unrepugnant habits. Will such a bill as this bring back peace and order to those burdened and excited communities? Will it restore their social and industrial interests to their safe and normal condition? Will not the people of the invaded States regard a ten-year suspension as a mere temporizing expedient; a brief and restless respite; and not a substantial, permanent relief against the

evils which beset them? After twelve years of urgent appeal will they accept this as the finality; the full and satisfactory reward of their long, patient, and hopeful waiting?"

Mr. Page, of California: "Mr. Speaker, I do not believe the gentleman from Kentucky has a right to complain. There has been no attempt on this side of the House or by myself to deprive any member of the House of the right to debate this question."

"All I ask is, and I earnestly appeal to all the members upon this floor, to relieve the people of the Pacific coast by giving them some legislation. Let this be placed upon the statute-books of the nation. Let that people to-day be relieved of this terrible evil of which they complain. And if it shall fall to the lot of either side of this House to gain political advantage, let that be so. I am not here to urge this as a party measure, but to accept it as being the best thing we can do."

"While the gentleman from Kentucky stated that he spoke for the Pacific coast, and that this bill was practically better than nothing, I believe, Mr. Speaker, and I know I speak both my own sentiment and the sentiment of a large portion of that people when I say that some of the sections included in this bill are far better for our people than the sections contained in the vetoed bill."

"We have reduced the limitation of suspension from twenty years to ten. While we voted, some of us for twenty years, if there had been a reasonable chance for fifteen years I would have voted for that. But my judgment is we can not afford to place the President in the position of being compelled to sign or veto a fifteen years' bill after having vetoed a twenty years' bill. I believe ten years will give us relief. I ask the members of this House to give us this bill of ten years; and before the expiration of those ten years I trust there will be a public sentiment in this country that will unanimously extend the term of limitation."

This modified bill passed both Houses, and was approved by the President.

The session closed on August 8th.

CONNECTICUT. The State officers during 1882 were: Governor, Hobart B. Bigelow; Lieutenant-Governor, William H. Bulkeley; Secretary of State, Charles E. Searls; Treasurer, David P. Nichols; Comptroller, Wheelock T. Bachellor.

THE LEGISLATURE.—The members of the Legislature convened at the Capitol for the biennial session of 1882, on January 4th, and both Houses were speedily organized. In the Senate, Robert Colt, from the Ninth District, was elected President *pro tempore*, over his competitor, Rial Strickland, from the Second District, on a vote of 16 to 7; and, in the Lower House, John M. Hall, of Windham, was elected Speaker over George G. Sill, of Hartford, upon a vote of 138 to 89.

A few hours later Governor Bigelow sent his message on public affairs through the Ex-



Executive Secretary, who read it to the joint Assembly, the two Houses having come together for that purpose. He called the attention of the Legislature to the fact that Long Island Sound, the great commercial thoroughfare of Connecticut on her southern boundary, was practically without defense, as there were no fortifications worthy of the name between the ocean and the sea-ports of the State, which was thus exposed to an attack from the sea. The State depends, in this matter, wholly upon the Federal Government. The Governor, therefore, urged the General Assembly to take such action as would call the attention of the Federal Government to their defenseless condition, and induce her to provide for it against any possible emergency.

From the report of the directors of the Agricultural Experiment Station, which was established, by act of the Legislature, in 1877, it appears that, during the year 1881, the station's work has been mostly directed to the examination of commercial fertilizers, fodder, and feed-stuffs produced, or used, in Connecticut, and to the examination of milk and dairy products. As this station had no place of its own for attending to its operations, but from the beginning was kindly tendered the use of certain rooms in Yale College for five years, till June, 1882, the Board of Control requested of the Legislature that it might be furnished with the means of carrying on its work independently and efficiently. Connecticut was the first among all the States of the Union to create and put to practical work an agricultural experiment station. Its lead in the establishment of this service has been followed by many other States. They have recognized the wisdom of the action, and have created institutions for the same ends. Most of these are on a larger scale.

The Storrs Agricultural School was authorized by an act of the Legislature in 1881, and actually opened on the 28th of September of that year, and now is in operation, with three instructors and thirteen scholars. It is the first of its kind in this country, and, having no example to follow, it must reach success through experience. It is intended to be more technical, and nearer the farm, than the Agricultural College has been or well can be. Its object is not to make scholars, but to train young men to be well-informed and skillful farmers.

Two acts were passed at this session—the one “appropriating twenty-five thousand dollars for the erection of a building for the Agricultural Experiment Station”; the other, “providing for regular annual appropriations to agricultural societies.”

With reference to the law enacted in 1881, providing for the licensing of pharmacists in the State, and for the registering of poisons sold by druggists to private people; creating, also, a Commission of Pharmacy, charged to see that its provisions are faithfully carried

into execution—the commission have reported that “the law works well, and meets the requirements of public safety.” The list of poisons, the sale of which is reckoned as subject to the duty of registration, is found to be too restricted, and should be extended by adding to it “laudanum, and other dangerous forms of opium.”

Since July 20, 1881, when the newly-finished portion of the Insane Asylum at Middletown, the South Hospital, was opened for the reception of patients, above two hundred have been lodged in it, in addition to the inmates of the old hospital, the year 1881 having begun with 529 insane persons under treatment and ended with 731, of which number not less than 719 belong to the indigent class, and “are aided by the State”; but, notwithstanding this great draining, the almshouses of the towns are not yet relieved of them, and their number seems to be increasing.

The trustees of the Industrial School for Girls state that a large number of “neglected youth, of both sexes, may be found within the State growing up, without responsible guardianship, in varying conditions of ignorance and idleness, and plainly drifting toward a life of pauperism and crime”; adding, “They are to be found in the streets of the cities, in the almshouses of the towns, and in other places equally ill-fitted for making them good citizens.”

An act was passed at this session “creating a commission to consider the case of children now in almshouses.”

A new penitentiary building, in a healthy location, is called for, as the old State Prison, wherein the convicts are now confined, besides other reasons of unfitness, stands on a “manifestly unhealthy situation.” The number of sick, or sickly convicts, unable to work, is by that cause kept very large. It is said that about three fourths of the cases of disabling sickness can be traced to malarial disorders, which cause necessarily diminishes the income derived from the earnings of convicts, and increases the expenses of the State.

The reorganization of the courts of the State is strongly urged, as they “do not meet the just demands of the people.” This is especially the case with “the courts of first resort, or original jurisdiction.” The system of the justices of the peace is regarded as very defective. One thousand such justices are selected and installed every two years; little inquiry is made as to their capacity and fitness for the discharge of judicial duties.

A bill “creating the office of State Attorney-General” was introduced and acted upon at this session, but without final result; it was continued to the next General Assembly.

The Legislature closed its session of 1882 by final adjournment on April 20th. Among the bills then passed, or continued to the next Legislature, were the following:

A bill “to carry into effect the provisions

of the twenty-sixth amendment to the State Constitution"; "proposing a constitutional amendment to prohibit the manufacture and sale of intoxicating liquors"; "providing for the issue of \$500,000 of three and a half per cent twenty years' bonds, to take up and redeem outstanding State bonds"; "imposing a State tax of one and a quarter mill on the dollar, to be assessed on the grand list of October, 1881"; "providing that railroad bonds shall be taxed on their par value, unless they are below par"; "providing that all life-insurance companies may do accident-insurance business"; "providing that when twelve persons petition for temperance-instruction in the public schools, it shall be considered and decided upon by the school visitors"; "providing for the erection of a statue of Governor Buckingham in the Capitol Building."

The amounts of money from the State Treasury appropriated for various purposes at this session, besides the two items before mentioned relating to agriculture, are as follows: \$5,000 for the use of the Fish Commissioners; \$3,000 to buy additional land for the State Hospital for the Insane; \$5,000 to Thomas Lamb for work done on the Capitol building; \$5,000 for grading the Capitol grounds; \$2,500 for the State Library; and \$1,500 to the commission on the revision of the liquor laws, for services and expenses."

**STATISTICS.**—In obedience to the provision of the law enacted in 1878, "that the treasurer of every savings-bank in the State shall annually deliver to the Comptroller a sworn statement of the name, with amount to his credit, of every depositor who shall not have made a deposit, or drawn thereon for a period of more than twenty years next preceding," the Society for Savings at Hartford, a bank incorporated in 1848, has made this year the required return, the depositors unheard from for above twenty years, and named in the list, numbering 572; the aggregate amount of deposits unclaimed being \$74,817.21; the largest sum of single deposits, \$6,878.97; the smallest, \$1.39. There are in this list 22 names with \$1,000 and over placed to their credit; 62 with \$100 and over; and 51 with \$50 and over. These banks have on deposit over \$84,000,000, the largest amount ever held by them. There are 187,471 depositors, each having less than \$500 to his credit, and 50,522 each having over that sum.

The statistics of the railway lines operating within the limits of Connecticut for the year ending September 30, 1882, with the exception of the New York and New England, the Norwich and Worcester, and the New Haven and Northampton roads, were as follows:

**THE NEW YORK AND NEW HAVEN RAILROAD.**

Gross earnings .....	\$5,987,807 64
From passenger transportation.....	\$3,393,513 86
From freight transportation.....	2,065,355 52
Total operating expenses.....	3,803,678 97
Net earnings.....	\$2,184,128 67

The total number of passengers carried was

6,397,385, and the total number of miles traveled 8,697,211. It should be borne in mind that the returns of this road this year include the Shore Line division.

**THE CONNECTICUT WESTERN RAILROAD.**

Total operating expenses .....	\$316,470 20
Gross earnings.....	807,106 79
From passenger transportation.....	\$110,110 30
From freight transportation.....	184,078 24
Net deficit.....	\$9,368 41

The total number of passengers carried was 241,707; and the total miles run, 809,489. While the earnings of this road are \$4,681.65 more than last year, the operating expenses have also increased \$49,892.54. This large outlay has been expended in improving the road, greatly bettering its condition.

**THE CONNECTICUT VALLEY RAILROAD.**

Gross earnings .....	\$195,373 61
From passenger transportation.....	\$102,699 25
From freight transportation.....	77,980 18
Total operating expenses .....	195,083 82
Net earnings .....	\$289 79

Total number of passengers carried, 330,984; and total miles run, 228,024.

**THE AIR-LINE RAILROAD.**

Gross earnings .....	\$308,026 47
From passenger transportation.....	\$14,845 01
From freight transportation.....	74,965 09
Total operating expenses .....	118,262 86
Net earnings.....	\$194,768 61

Total passengers carried, 94,378; and total miles run, 170,506.

**THE OTHER ROADS.**—The gross earnings of the New York, Providence and Boston were \$1,065,650.31, and the operating expenses, \$561,375.62, making the net earnings \$504,274.69. Total passengers carried, 1,026,495; and total miles run, 641,353.

The gross earnings of the Shepaug road were \$62,931.83, and the operating expenses, \$54,393.83, making the net earnings \$8,538. Total passengers carried, 16,524; and total miles run, 9,930.

Gross earnings of the New London Northern, \$587,384.48, and total operating expenses, \$519,312.18, leaving a net earning of \$68,072.30. Total passengers carried, 420,066; and total miles run, 565,968.

Gross earnings of the Housatonic road, \$746,327.76, and operating expenses, \$567,200.58, making net earnings \$179,127.18. Total passengers carried, 340,478; and total miles run, 539,470.

Gross earnings of the Naugatuck road, \$714,898.01, and operating expenses, \$463,865.10, making net earnings \$251,032.91. Passengers carried, 415,391; miles run, 362,746.

Gross earnings of the New Canaan road, \$15,108.63; operating expenses, \$9,268.56; net earnings, \$5,840.07; passengers carried, 41,369; miles run, 18,240.

Gross earnings of the Danbury and Norwalk road, \$200,993.90; expenses, \$128,002.67; net



earnings, \$72,990.73; passengers carried, 346,784; miles run, 123,732.

The railroad companies contribute in taxation toward the expenses of the State, \$484,732.42. The insurance companies, including fire and life, foreign and domestic, \$342,331.98, and savings-banks, \$252,886.10.

These three great monetary interests pay in taxation more than five eighths of all the expenditures of the State.

The life and fire insurance companies are among the most prominent corporations of the State—some of them the largest and most prosperous in the world. The last report of the insurance department shows that the fire-companies had over \$23,000,000 of assets, and the life-companies over \$105,000,000.

The report of the Treasurer shows that the funded debt of the State, reduced by the payment of \$10,000 during the year, was, November 30, 1882, \$4,957,600.

It has cost for the education of the 121,185 children in the public schools for the last year, \$1,563,065.16; of this sum the State paid \$222,773.

In addition to the cost of public schools, the State expended for public education \$49,500 for the Normal School, \$5,000 for the Storrs Agricultural School, and \$8,388.03 for the Board of Education.

The largest item in the list of expenditures is for charitable, humane, and reformatory purposes. It amounts to over \$276,000. It includes the cost for care of 380 boys in the Reform School; 183 girls in the Industrial School; 1,079 insane persons in the hospital at Middletown, 28 in the retreat at Hartford, 24 in hospitals outside the State; 57 imbeciles in the school at Lakeville; 146 sick and wounded soldiers in hospitals; 100 soldiers' children in different towns; 18 blind persons at Boston; 51 deaf and dumb at Hartford, and 241 paupers at Tariffville.

The population of the State, by counties, in 1880 and in 1870, was as follows:

COUNTIES.	1880.	1870.
Fairfield .....	112,042	95,276
Hartford .....	125,882	109,007
Litchfield .....	52,044	45,737
Middlex .....	85,589	86,099
New Haven .....	156,528	121,257
New London .....	73,152	66,570
Tolland .....	24,112	22,000
Windham .....	43,856	38,518
The State.....	622,700	587,454

**POLITICAL CONVENTIONS.**—The Republican State Convention met at New Haven on September 20th, little less than five hundred delegates being in attendance, and nominated the following ticket:

For Governor, William H. Bulkeley, of Hartford; Lieutenant-Governor, John D. Candee, of Bridgeport; Secretary of State, Stiles T. Stanton, of Stonington; State Treasurer, Julius Converse, of Stafford Springs; State Comptroller, Frank D. Sloat, of New Haven.

The following is the text of the platform adopted:

The Republican party of Connecticut reaffirms its creed of all rights to all men; the preservation inviolate of each and every constitutional amendment; a free and fair ballot and the enactment and enforcement of appropriate legislation to preserve this right, upon which the integrity of our institutions rests; a tariff reduced and revised, not only for revenue, but also for the protection of American labor against the labor of the Old World; the abolition of useless offices; equal taxation and a rigid economy in all departments of the nation and the State; the protection of the rights and liberty of every American citizen at home and abroad; education under the fostering care of the General and State governments, which shall bring its advantages to the home of the humblest citizens; the purity of the ballot-box and its protection against intimidation, bribery, and corruption; appropriate legislation for the encouragement of commerce, the reduction of the burdens of taxation, State and national, and the limitation of expenditures to the necessities of the Government; a judicious system of civil-service reform, by which competent officers shall be secured for the public service—Federal, State, and municipal—and protected from assessment and removal except for cause.

The Republican party, as an earnest of its future, refers to the record of its past service, both in war and in peace—to the suppression of the rebellion, the abolition of slavery, the enfranchisement of a race, the resumption of specie payments, the preservation of the honor of the country, the payments of its debt, the universal prosperity at home and peace with all nations. It reveres the memories of its martyred Presidents—Lincoln and Garfield—and it cordially indorses and supports the administration of President Arthur, who, by his modesty, his capacity, and his fidelity to the interests of the people, and by the wisdom and courage of his public acts and utterances, has commended himself to the confidence and approval of his fellow-citizens without distinction of party. It believes that all just government derives its authority from the consent of the governed. It has confidence in the integrity and good sense of the people, and is not afraid to submit to them questions which vitally affect their prosperity and well-being. It therefore declares itself in favor of submitting to the people, at a special election to be held for the purpose, the amendment to the Constitution proposed at the last session of the General Assembly relative to the prohibition of the sale and manufacture of intoxicating liquors, and of enforcing by appropriate legislation whatever their will may be upon that question.

For the purpose of promoting economy and watchfulness in the expenditures of the State, we believe they should be regulated by a system of annual appropriations.

We declare for the encouragement of State industries; the support of the public schools; a limitation upon special and private legislation, and the passage of liberal general laws, under which all the citizens of the State shall have equal rights, and none shall enjoy exclusive privileges.

We declare that the growing influences of the great corporations of the country ought to be jealously watched; that the assumption of any undue power on their part should be promptly checked, and that the principle—that the people must control the corporations and not the corporations the people—should be vigorously maintained.

The Democrats, represented by nearly four hundred delegates from all sections of the State, convened at Hartford on October 4th, and nominated their candidates for the several public offices, as follows:

For Governor, Thomas M. Waller, of New London; Lieutenant-Governor, George G.



Sumner, of Hartford; Secretary of State, D. Ward Northrop, of Middletown; State Treasurer, Alfred K. Goodrich, of Vernon; State Comptroller, Thomas Sanford, of Redding.

The following platform was unanimously adopted:

*Whereas*, The Democratic party, originally organized in the early days of the republic to secure the administration of public affairs by those most loyal to our form of government as defined by the Constitution, and to the principle of the sovereignty of the people, upon which the Government is based, has always aimed to meet political issues as they have from time to time arisen in the spirit which actuated its founders, and to determine such issues by the test of their relations to the first and unchanging principles of the party;

*And whereas*, The great changes which have followed the civil war, and the rapid growth of the country in population and wealth, the dangerous and growing evils developed by years of partisan strife, without any clearly-marked differences of political conviction or definite object of administrative action; the immediate necessity of putting an end to vicious habits that are fast hardening into a permanent system, and of securing the selection of public officers and the administration of public affairs in accordance with the true underlying principles of our Government and the aroused conscience of the people, seeking expression in many ways, but in every way demanding a thorough clearing of the political atmosphere, and an honest and definite presentation of political principles, all require a restatement of Democratic principles as applicable to the condition of to-day and the political issues of the immediate future—the Democrats of Connecticut, in convention assembled, do declare:

*First*, The Constitution of the United States, with its amendments, is the supreme law, and defines a form of government which is peculiar to itself, the natural growth of our history, and is of all forms of government the best adapted both to the protection of life and property and the security of personal freedom. Under this form of government the exercise of sovereign power is not confined to any one agent, but is divided; the exercise of certain specified powers is intrusted to the Federal Government, and the exercise of all other powers is reserved to the States and to the people; to the existence of this Government the supreme authority of the Federal Government, within the limit of the powers to it confided, is absolutely essential, and equally essential is the independence of the several States and their unimpeded exercise of all powers not assigned to the General Government. The Constitution of the United States, together with the constitutions of the several States, defines the form of government for one people, constituting "an indestructible union of indestructible States." To this form of government we give our undivided support—a support rooted in the firm conviction of its absolute wisdom and strength—and to maintain and preserve the Government in its strength and purity we deem it necessary:

1. To give a hearty support to the vigorous action of the General Government in the wise exercise of all powers to it assigned. The supremacy of the General Government within the range of its powers is essential to the protection of the whole people and to the promotion of the general welfare.

2. To fearlessly maintain the independence of the States in the wise exercise of all powers not assigned to the General Government. Such independence contributes to the permanent strength of the whole Government, and is essential to the preservation of personal freedom.

3. To persistently oppose all strained interpretations of the power named in the Federal Constitution. The authority of the Federal Government being su-

preme within the limits of its action, strict construction of the powers assigned to it is absolutely essential to the permanent preservation of that division of the exercise of sovereign power between the local and the General Governments, which is the peculiar basis, the strength, and the glory of the American Republic.

*Second*, Our government is the result of the will of the people. Back of all laws and all forms stand as supreme sovereign the qualified voters. To this sovereign we owe allegiance; to honestly and fearlessly aid this sovereign in the wise administration of affairs is the highest duty of every citizen; to ascertain and establish the best methods by which this sovereign can govern a powerful, rich, and populous country is the great political problem now demanding solution. We believe in the sovereignty of the people; we believe that the absolute despotic power, which in every government must be vested in some man or body of men, is most wisely and safely intrusted to the qualified voters; and to maintain the sovereignty of the people, to secure its wise exercise, to preserve its purity, and to insure its permanency, we deem it necessary:

1. To hold and to encourage a firm and generous faith in the ability of the people to govern; in their intelligence, honesty, and patriotism, and inspired by such faith to speak to our own sovereign, honestly and truly appealing to his reason and conscience, not seeking to make him the slave of passion or the victim of deception.

2. All sovereigns must govern by agents. The people, as sovereign, must of necessity almost wholly govern by agents. The selection of these agents should be determined by laws, so framed that the selection may be made in accordance with a permanent system adapted to the rejection of the incompetent and the appointment of the most fit.

3. To protect the people in the direct exercise of power through the ballot, not only by providing more efficient guards against intimidation and fraud but by securing a true expression of the people's will when called upon to appoint by ballot any public agent.

*Third*, In pursuance of these principles, and applying them to the chief questions now at issue, we advocate:

1. Strict economy in the expenditure of public moneys, and the restriction of appropriations from the national Treasury to objects clearly of a national character.

2. A revision of the internal revenue law and of the tariff that shall reduce taxation, so that the revenue shall not exceed the present needs of the Government, and shall establish a tariff upon the only constitutional basis, the production of a revenue sufficient to meet expenses, giving incidental protection to industries that promote the general welfare, and no protection to mere monopolies.

3. Legislation appropriate to secure the abolition of all unnecessary offices, the clearing from the civil service of all retainers of politicians, and the future appointment of such persons only as shall have proved themselves most fit by tests of merit provided by law and open to the free competition of every citizen.

4. Legislation appropriate to secure a most careful selection of all public officers, both State and Federal, by providing an appointing power for each class of officers, with special reference to the duties to be performed.

5. Legislation appropriate to afford a more thorough protection against fraud in the use of the ballot, and to secure to the people when called upon to appoint any public officer by ballot the practical power as well as the right to express their preferences under the forms and protection of law.

*Fourth*, Willing to recognize in a political opponent any act worthy of commendation, we cordially approve the veto by President Arthur of the River and Harbor Bill. Following in the footsteps of the Democratic Presidents who have heretofore prevented such unconstitutional legislation by the exercise of



the veto power, he has aroused the wrath of his own party, who offered him the unprecedented insult of permitting the passage of a vetoed bill by a two-thirds vote while in full control of both Houses of Congress. We ask all citizens of this State opposed to such extra, unjust, and unconstitutional legislation, to unite with us in defeating the Republican party, which has so openly committed itself in support of the River and Harbor Bill, as well by the obstinate refusal of its late convention to approve the veto of the President, as by its renomination of the Congressmen who supported the bill and opposed the veto.

*Fifth.* The adoption of an amendment to the State Constitution is a most important exercise of the sovereign power vested in the people. The exercise of that power has been wisely guarded by requiring such amendment to be first approved by the House of Representatives; to be then published with the laws and submitted to the people; to be then approved by two thirds of each branch of the General Assembly, and then, and then only, to be submitted to the people for rejection or adoption. No member of the Legislature can vote to submit to the people a constitutional amendment of which he does not approve without violating his oath of office and destroying one of the safeguards which the people themselves have erected for the protection of the Constitution from sudden changes. We denounce the declaration of the Republican party platform favoring the submission to the people of a proposed amendment to the Constitution which it fails to approve, as evasive and cowardly. We fully recognize the evils arising from the abuse of intoxicating liquors. We believe the evils may be most effectually checked by the force of an enlightened public opinion; they may be partially restrained by wise legislation; but such legislation should not be so oppressive or impracticable in its provisions as to trench on the personal rights and liberties of citizens, and ought not to be made a partisan question. Legislation so equally affecting every one, in reference to a subject where all honest men seek a common object, can most safely be left to the individual conscience, free from the blindness of party prejudice. We believe the incorporation of a police regulation relative to the sale of intoxicating liquors into the State Constitution to be opposed to the plainest principles of sound government.

The Prohibitionists of Connecticut assembled in State Convention at Hartford in April, about forty delegates being in attendance. No platform was adopted nor reported, but the following State ticket was nominated:

For Governor, George P. Rogers, of New London; for Lieutenant-Governor, William S. Williams, of Glastonbury; for Secretary of State, F. H. Sage, of South Norwalk; for State Treasurer, Edward Tuttle, of Meriden; for State Comptroller, C. S. Harrington, of Middletown.

The Greenbackers nominated — Tanner for Governor, and — Phelps for member of Congress from the First District.

The election resulted in an almost entire victory to the Democratic nominees.

The aggregate votes polled for Governor throughout the State in 1882 were 16,598 less than in 1880, they having been 115,165; of which 59,180 were cast for Waller, Democrat; 54,526 for Bulkeley, Republican; 928 for Rogers, Prohibitionist; and 481 for Tanner, Greenbacker. In 1880 the entire vote for Governor was 132,763, distributed into 67,070 for Bigelow, Republican; 64,293 for Eaton, Democrat; 897 for Baldwin, Greenbacker; 488 for Rogers,

Prohibitionist. In regard to Congressmen, the Democratic nominees, Eaton, Mitchell, and Seymour, were elected from the First, Second, and Fourth Congressional Districts; the Republicans having re-elected their nominee, Wait, from the Third District. In the Senate there are Republicans 13, Democrats 11. In the Legislature of 1881 it stood, Republicans 17, Democrats 7. To the Lower House the Democrats elected 109 members, the Republicans 139. In 1881 the proportion of their respective numbers was 101 and 147. The Republican majority in the next General Assembly will be 30 in the House of Representatives, and 2 in the Senate.

COREA, a kingdom of Eastern Asia, occupying the peninsula opposite the Japanese island of Nippon and bordering on the Chinese province of Mantchooria. The King of Corea acknowledges the nominal suzerainty of China, but has for ages preserved a practical independence. The Chinese have assisted the Coreans in their wars with the Japanese, who conquered the country in the third century of the Christian era, and have repeatedly overrun it since, claiming tribute and submission down to the present time. The Coreans are a Mongolian race (the Fuyus, who founded the Japanese Empire), grafted on another stock which shows evidence of Aryan origin. For nearly three hundred years the Coreans, taught by the terrors of invasions from the Japanese on the one side and the Mantchoos on the other, have followed a policy of complete non-intercourse with foreigners.

OPENING OF TREATY PORTS.—Within the last ten years, influenced by the pressure of the Chinese and Japanese Governments, they have commenced to open their gates. The urgency of China and Japan and the complacency of the Coreans is partly explained by the dread of Russian annexation, and the desire to have friends among the Western nations interested. In 1876 Japan, in consideration of abandoning her traditional claim to tribute, obtained a treaty conceding certain commercial privileges. The garrison town of Fusan, which the Japanese had held for centuries on the peninsula, was transformed into a trading-station. Japan also obtained the right of trading in the sea-port of Gensan, on the northeastern coast, and in 1880, in the port of Incheuin on the western coast, twenty-five miles from the capital, Seoul. The last concession precipitated a conflict between the reactionary party in Corea, headed by Tai-wen-Kun, the father of the King and late Regent, and the progressive party, represented by the young King and Queen. The progressive party was divided between the friends of Japan and those partial to China. The Japanese military system was introduced by the Japanese faction. Commodore Shufeldt, working with the American Minister at Peking, and aided by the influence of Li-Hung-Chang and the Chinese Government, obtained through the Chinese party a treaty, signed in June,



1882, by which Corea was thrown open to American commerce. A similar convention was signed with China on the same day.

**INSURRECTION.**—Four days afterward an outbreak of the conservative elements resulted in the massacre of the Queen, the heir-apparent and his bride, and the ministers, thirteen in number, who were in favor of foreign intercourse. The Japanese legation was attacked, but escaped to another town, and thence to a British man-of-war. Although the Japanese had no reason to favor the concessions made to China and the United States, and had no hand in the proceedings, they were visited with the special wrath of the Corean mob, and only escaped a wholesale slaughter by flight. Within a month the Japanese envoy re-entered Seoul with a military escort. The people and Government of Japan were greatly incensed and made immediate preparations for war, but the matter was compounded by the payment of a heavy indemnity. The usurping rebel surrendered on the arrival of a Chinese force of three or four thousand men, which the Chinese envoy led into Seoul simultaneously with the return of the Japanese ambassador, and he was taken a prisoner to Tientsin, and the King restored to full authority.

**THE AMERICAN TREATY.**—Great Britain and Germany hastened to conclude similar arrangements with Corea as those secured by the American plenipotentiary. France negotiated for a treaty, but insisted on the condition that French missionaries should have the liberty to teach, which the Coreans refused to grant. French Jesuit missionaries have for centuries been the only foreigners who could obtain access to Corea. Their propaganda was forbidden. Yet at times it was secretly protected by the influential converts whom they gained. At other times they have been rigorously dealt with, and on more than one occasion suffered martyrdom. The ex-Regent, who headed the insurrection in July, attempted to extirpate Christianity in 1864, slaughtering the native Christians and putting nine Jesuit missionaries to the sword.

The American treaty was framed under the inspiration of the Chinese authorities, and embodies those liberal principles which the Chinese have endeavored to introduce in their treaty arrangements, and which it has recently been the policy of the United States Government to promote. The aim of the Chinese is to escape from the harsh and humiliating conditions which Great Britain imposed upon them after the last opium-war, and which are now maintained to be the proper bases of treaty arrangements with Oriental powers. The treaty introduces China by stating that the President of the United States admits that Corea has always been tributary to China, "but the treaty shall be permanently regarded as having nothing to do with this." The restriction of the amount of customs duties which China is allowed to levy is relaxed; the limi-

tations in the Corean treaties, instead of being fixed at 5 per cent *ad valorem*, as in the Chinese, vary from 11 per cent on necessities to 30 per cent on luxuries. The Coreans are also allowed to charge higher tonnage dues than the Chinese. Four ports are opened to the commerce of the treaty nations, but strangers are prohibited from traveling in the interior. The importation of opium is strictly prohibited. Foreigners are not permitted to engage in the coasting-trade. The export of grain may be interdicted in times of scarcity. There is a clause providing that diplomatic correspondence shall be carried on between the contracting parties in the Chinese language. The right of extra-territoriality is qualified by a provision that "if in the future the Corean Government shall bring the laws and legal procedure of Corea into harmony with those prevailing in the United States, the power now granted to consuls of the United States to act judicially shall be withdrawn, and American citizens living within the boundaries of Corea transferred to the full jurisdiction of the native local authorities." The favored-nation clause is also modified by the proviso which was introduced in the Chinese-German treaty of 1880, and in the more recent one concluded with Brazil. In the Corean treaty the clause runs: "But all special concessions made to the most favored nation shall be explained and made public, so that the contracting party may know that such concessions have been made to the favored nations under special conditions."

**COSTA RICA (REPÚBLICA DE COSTA RICA).** For particulars relating to territorial division, population, etc., reference may be made to the "Annual Cyclopædia" for 1877.

The President of the Republic is General Próspero Fernandez (entered office on August 10, 1882); the Vice-President is General Pedro Quirós; and the Cabinet (at the end of 1882) was composed of the following Ministers: Interior and Justice, General Victor Guardia; Foreign Affairs and Public Instruction, Señor José María Castro; Finance and (*ad interim*) War and Marine, Señor Bernardo Soto.

On the death of General Tomás Guardia, which occurred on July 6, 1882, Minister Lizano, as First Designate, assumed the executive power provisionally. The decease of General Guardia, who had for so many years been in name the President, but in fact the Dictator, of Costa Rica, provoked a marked exhibition of public excitement; but the peaceful change of government which ensued proved that his long permanence in power had been effectual in crushing out the spirit of civil strife.

The Bishop of Costa Rica is the Right Rev. Bernardo A. Thiel.

The Costarican Minister to the United States is Señor Manuel M. Peralta; and the Consul-General of Costa Rica at New York is Señor José M. Muñoz.

The United States Minister (resident in Guatemala, and accredited to the five Central



American Republics—Guatemala, Honduras, Nicaragua, Salvador, and Costa Rica) is Mr. H. C. Hall.

The military force of the country consists of the standing army, nominally 500 strong, and the militia, comprising all male citizens between the ages of eighteen and fifty-five, the reserves being made up of men between thirty and fifty-five. The number susceptible to be called upon to carry arms was reported at 16,370 in 1879.

**STATISTICS.**—The financial condition of Costa Rica, once so flourishing, would seem to grow more and more unsatisfactory each successive year, and this is attributed mainly to the persistent maintenance, during the Guardia administration, of a ponderous and costly government machinery alike incommensurate with the requirements and possibilities of the country, and an ever-increasing home debt accruing from successive loans the proceeds of which have been applied in part to cover deficits, while the remainder has been wasted in unproductive public works. The revenue for the fiscal year ending April 30, 1880, as given in the "Annual Cyclopædia" for that year, was \$2,802,279, and the expenditure \$3,460,597, leaving a deficit of \$658,318. In an official statement issuing from the finance department, and bearing date of October 17, 1882, the expenditure for the *nine months* immediately ensuing was estimated at \$3,271,518, to be distributed as follows:

Interior.....	\$166,874 50
Police.....	50,546 00
Public Works.....	312,207 63
Justice.....	106,786 00
Worship and Charities.....	23,150 59
War and Marine.....	878,792 55
Finance.....	2,012,646 65
Foreign Affairs.....	42,505 00
Public Instruction.....	174,190 00
Additional.....	4,815 00
Total.....	\$3,271,518 97

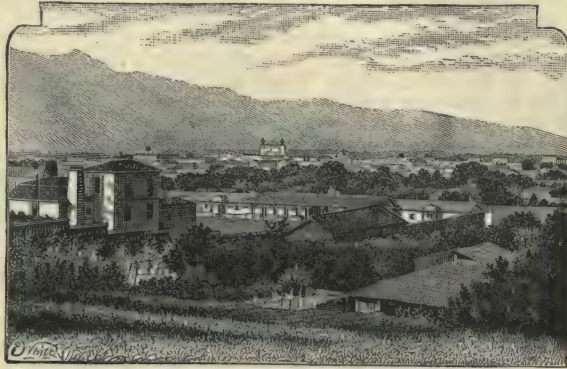
Now, the revenue for that period of nine months, if in the same proportion as for the year ending April 30, 1880, would be but \$1,101,710, and the resulting deficit would be \$2,169,803.97, or nearly double the amount of the revenue. To lighten the burden of such an onerous deficit, however, the Executive, duly authorized by the Congress, issued a decree on October 18, 1882, ordering a reduction of 10 per cent of the salaries of all persons employed or pensioned by the Government and paid out of the public funds. Yet, even after deducting 10 per cent from the total estimated expenditure (in which, of course, are included many outlays other than salaries), as shown in the foregoing table, the deficit would still exceed the income by \$740,942.

The foreign debt of Costa Rica stood as fol-

lows at the end of 1882, according to the report of the bondholders' committee:

Principal of 6 per cent loan.....	\$291,200	
Interest on 6 per cent loan.....	508,248	
		\$1,449,448
Principal of 7 per cent loan.....	\$1,460,100	
Interest on 7 per cent loan.....	970,966	
		2,481,066
Total foreign debt.....		\$3,880,514

This amount, even at an exchange of 10 per cent, would give the sum of \$21,342,827. Payment of the 6 per cents is guaranteed out of the national revenue, the proceeds of sales of



SAN JOSÉ, THE CAPITAL OF COSTA RICA.

state property, and the customs receipts; and the 7 per cents were to be paid from the proceeds of the tobacco and spirit monopolies, the export duty on coffee, and the profits on local railway traffic. "In return for this heavy indebtedness," says a native writer, "we have three sections of railway, of the estimated value of £1,200,000," or say \$6,600,000, calculating exchange at 10 per cent.

The precise amount of the home debt it would be difficult to determine, in the absence of official returns; but with expenditures aggregating \$28,541,000 for the decade 1871-'80, against an aggregate revenue of only \$24,920,400, the country must owe at least \$3,620,400 on that score. "Thus we prove that there is a crisis," adds the writer already quoted, "and this crisis the empirics would cure by issuing paper money, which would at once lead to the withdrawal of all specie from circulation; violent fluctuations in exchange, and the consequent immediate depreciation in the value of the new currency; the employment of this last in risky and unproductive speculations; the imposition of an immense tax on future revenues; and the immediate discredit of the Government which issues that paper money."

President Fernandez is said to share with his Cabinet ministers in the conviction that the country's salvation depends upon the completion of the railway and the equitable settlement of the national debt. The bondholders have been informed that it is useless to expect

payment from Costa Rica until the railway is finished. This will require at least two years, and an additional expenditure of about one million pounds sterling, to which the republic declares its total inability to contribute anything. Hopes were entertained of the possibility of raising the funds before long.

Arrangements were made for the extinction of the home debt, the different banks dividing the negotiation between them. A balance was to be struck, and the amount due would then be paid by the Government in \$100 bonds, which would be canceled by the Anglo and Union Banks by quarterly drawings in which the amount would be employed as a redemption fund, which might have been received in notes in the custom-house. Notes receivable in the custom-house were to be issued to the full amount of the debt. The banks were to issue notes in consideration of a commission of one per cent, and agreed to redeem the bonds as aforesaid with the notes received from the custom-house. These measures, however, do not appear to have proved successful. On December 4th there was a panic in San José, and all who held bonds, notes, or drafts, commenced trading them off in the hope of saving some portion of the capital invested. At the doors of the banks crowds gathered to effect transfers in the streets, and notes of the National Bank were sold at 25 per cent discount. Public confidence was afterward partially restored; but the extreme measures resorted to by the Government had evidently produced an injurious rather than a salutary effect, and there was little likelihood that the crisis would soon subside.

Concerning the foreign commerce of the republic, no later statistics have been published than those given in the volume of the "Annual Cyclopædia" for 1880.

The branches of the railway so far in operation are those from Alajuela to Cartago, *via* Heredia and the capital (27 miles); from Puntarenas, on the Pacific coast, to Barranca (9 miles); and from Limon, on the Atlantic coast, to Rio Suizo (71 miles): total, 107 miles.

The telegraph lines are of the aggregate length of 454 miles, with 16 offices, and, establishing communication between the ports of Puntarenas and Limon, and the principal cities of the interior, extend to the frontier of Nicaragua.

For interesting details concerning public education, reference may be made to the "Annual Cyclopædia" for 1879. The establishment of normal schools in each of the provinces was decreed in October, 1882.

The cordial relations of the republic with the neighboring states were maintained unbroken throughout the year.

**COTTON - CROP OF THE UNITED STATES, AND ITS SPECIFIC MANUFACTURES.** The cotton-crop of 1880, as returned by the census, amounted to 5,746,414 bales. This was an average of 0.40 bale per acre of the land

planted. This crop was gathered from thirteen States and the Indian Territory, and the yield of each was as follows:

STATES.	Acres.	Bales.	Bales per acre.
Alabama .....	2,380,086	699,654	0.30
Arkansas .....	1,042,976	608,256	0.58
Florida .....	245,595	54,997	0.22
Georgia .....	2,617,188	814,441	0.31
Indian Territory .....	35,000	17,000	0.49
Kentucky .....	2,667	1,367	0.51
Louisiana .....	864,787	508,569	0.59
Mississippi .....	2,093,330	955,808	0.46
Missouri .....	82,116	20,318	0.68
North Carolina .....	898,158	389,598	0.44
South Carolina .....	1,864,249	522,548	0.38
Tennessee .....	722,562	380,621	0.46
Texas .....	2,178,782	808,642	0.87
Virginia .....	45,040	19,505	0.44
Total United States .....	14,462,431	5,746,414	0.40

Under the term *specific* cotton manufactures are included establishments which work cotton into a fabric known and sold under that name. The spindles mentioned are those making yarn for mixed goods, and spindles appurtenant to looms upon which cotton is woven into cloth.

The returns of the *specific* manufacture of cotton-yarn and woven fabrics, including some cotton hosiery, are as follows:

Number of spindles .....	10,653,495
Number of looms .....	225,759
Bales of cotton consumed .....	1,670,344
Number of persons employed, exclusive of administration, as overseers, operatives, watchmen, mechanics, yard-hands, or laborers .....	172,544
Sum of wages paid, in the census year, to these persons .....	\$42,040,510

To the cotton consumed there should be added an amount for woolen-mills, for upholstery, increased amount consumed in the cotton year over the census year, and the total is 1,740,773 bales. The statement of the New Orleans Exchange is 1,705,334, and that of the New York Financial Chronicle 1,760,000.

In the consideration of the following data it will be observed—

1. That the capital employed is the sum of the estimates of the several owners or managers of the value of their mills and machinery, or what is known as the *plant*; these estimates vary greatly in respect to individual cases and to sections.

2. The spindles given are the producing spindles, not including doubling or twisting spindles.

3. The number of operatives is assumed to be the average number employed for a full year, as that was the intention of the questions framed. It will be observed that the average of the whole country in specific cotton-mills is a fraction over sixteen to each thousand spindles, being less in fine mills, more in coarse mills.

The horse-power available for this work, as returned by owners or managers, appears to be:

Water-power .....	183,813
Steam-power .....	119,265
Total .....	257,568



which would be at the rate of more than twenty-four horse-power to the 1,000 spindles. This is more than the power actually used, probably by one third.

STATISTICS OF SPECIFIC COTTON MANUFACTURES.

STATES.	Number of establishments.	Capital.	Spindles.	Looms.	Average number yarn.
Eastern .....	439	\$156,754,600	8,682,087	184,701	....
Middle .....	189	81,014,759	1,391,164	27,318	....
Southern .....	161	17,375,897	542,048	11,898	....
Western .....	17	3,185,000	88,186	1,842	....
Total .....	756	\$208,280,346	10,658,435	225,759	....

STATES.	Cotton consumed.		Goods manufactured.	Wages of operatives.	Value of materials.	Value of products.
	Bales.	Cost.	Pounds.			
Eastern .....	1,129,498	\$63,169,434	432,744,610	\$32,170,861	74,290,026	143,363,080
Middle .....	225,729	13,258,526	93,574,519	6,613,260	16,191,758	29,389,286
Southern .....	182,349	8,390,408	68,558,265	2,750,986	9,999,145	16,356,598
Western .....	29,768	1,627,357	12,086,847	505,403	1,725,418	2,981,196
Total .....	1,570,344	\$86,945,725	607,264,241	\$42,040,510	102,206,347	192,090,110

STATISTICS OF SPECIAL MILLS.—Mills employed in working raw cotton, waste, or cotton-yarn into hose, webbing, tapes, fancy fabrics, or mixed goods, or other fabrics, which are not sold as specific manufactures either of cotton

or wool; some work both fibers, but belong more in the class of cotton manufactures than in the class of wool manufactures. The number of establishments is 249; bales of cotton consumed, 40,597; cost, \$2,338,385.

STATES.	Capital.	Spindles.	Looms.	Operatives.	Wages and salaries of operatives.	Value of production.
Eastern .....	\$3,970,808	15,848	897	3,169	\$877,007	\$5,589,192
Middle .....	6,016,645	84,922	2,894	9,271	2,598,281	12,760,128
Southern .....	851,900	9,972	284	317	68,024	285,295
Western .....	255,900	....	....	171	84,947	329,665
Total .....	\$11,224,448	60,242	4,025	12,928	\$3,578,909	\$18,860,278

CRIMINAL JURISDICTION IN THE UNITED STATES. An effort was made, in the preparation of the census of 1880, to procure such information as would show the system of courts of criminal jurisdiction established in the several States, and for the United States.

UNITED STATES COURTS.—The Supreme Court consists of nine judges, who are nominated by the President and confirmed by the Senate. They hold their office during good behavior, and can be removed by impeachment. Their names, and that of the State from which each was appointed, were as follows in 1880: *Chief Justice*—Morrison R. Waite, of Ohio. *Associate Justices*—Horace Gray, of Massachusetts; Noah H. Swayne, of Ohio; Samuel F. Miller, of Iowa; Stephen J. Field, of California; William B. Woods, of Georgia; Joseph P. Bradley, of New Jersey; Ward Hunt, of New York; and John M. Harlan, of Kentucky. The States are divided into fifty-nine districts, in each of which, with four exceptions, a circuit court is also held; and each justice is required to sit as a circuit justice at least one term in two years. There is also a Supreme Court of the District of Columbia, and also of each of the Territories. Of the former there are six judges, and of the latter twenty-five judges. In addition, there are nineteen hundred and thirteen

commissioners appointed by the circuit courts. These issue warrants, make preliminary examinations, and commit or hold to bail offenders against the United States. State magistrates also have power to arrest, commit, or hold to bail, offenders against the United States. As there are no United States circuit or district courts in the Territories, the functions of these courts are exercised by the Supreme Courts of the Territories.

STATE COURTS.—The State courts embraced in the returns are those which have original or appellate criminal jurisdiction. Original criminal jurisdiction is not possessed by certain courts, except the power to issue writs. This is generally the case with the courts of last resort, known in most States as the Supreme Court (but in Alabama, Kentucky, Maryland, New York, and Texas, as the Court of Appeals; in Connecticut, as the Supreme Court of Errors; in Maine and Massachusetts, as the Supreme Judicial Court; in New Jersey, as the Court of Errors and Appeals; and in West Virginia, as the Supreme Court of Appeals).

In a number of States, judges of the highest court are *ex-officio* judges also of some court of inferior jurisdiction: as the Superior Court, in Connecticut; the Courts of Oyer and Terminer and of General Sessions, in Delaware; the Court of Oyer and Terminer, in New York.

the District Court, in Ohio; the Supreme Court, in New Jersey; the Court of Oyer and Terminer, in Pennsylvania; the Court of Common Pleas, in Rhode Island; and the County Court, in Vermont. The Maryland Court of Appeals is composed of the circuit judges, sitting in banc.

In Massachusetts original criminal jurisdiction (but in capital cases only) has been conferred upon the Supreme Judicial Court. In Maine, New Hampshire, and Rhode Island, the supreme judges hold trial terms in the several counties for the trial of all felonies and misdemeanors, but the court sits in banc for the hearing of appeals.

In capital cases, the jurisdiction of the Supreme Judicial Court in Massachusetts is exclusive. Exclusive jurisdiction in capital cases is exercised also by the Courts of Oyer and Terminer in Delaware, New Jersey, and New York, and by the Circuit Court in Virginia.

In three States special courts have been organized for the trial of all felonies (of which class of offenses they have exclusive jurisdiction), namely, the Circuit Court in Arkansas, the Superior Court in Georgia, and the District Court in Texas.

But in the majority of States the same court which has jurisdiction of felonies has jurisdiction of misdemeanors also, either of all misdemeanors—as in Alabama, Delaware, Illinois, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Missouri, New Hampshire, New York, Pennsylvania, South Carolina, Vermont, Virginia, West Virginia, and Wisconsin—or of misdemeanors not cognizable by inferior courts, as the case may be—as in California, Colorado, Connecticut, Florida, Maine, Michigan, Minnesota, Mississippi, Nebraska, Nevada, New Jersey, North Carolina, Ohio, Oregon, Rhode Island, and Tennessee. These courts of general criminal jurisdiction are known by various titles: usually as circuit or district courts, but sometimes as superior courts, or courts of sessions, or courts of oyer and terminer, or of common pleas. Their character is for the most part similar. Their territorial jurisdiction is commonly (but not always) bounded by the limits of the county in which the term is held. In Vermont and in Virginia they are called county courts.

In many States an inferior grade of courts exists, with jurisdiction of misdemeanors only. Such are the county courts of Alabama, Georgia, Illinois, Oregon, and Texas; also the District Court in Massachusetts, the Inferior Court in North Carolina, the Probate Court in Ohio, and the Quarter Sessions in Pennsylvania. In Arkansas, Mississippi, and Missouri, justices of the peace have jurisdiction of all misdemeanors.

There is a class of courts found only in localities which either possess concurrent jurisdiction with some of the courts already named, or replace them within certain defined territorial limits, e. g., in a city, county, or district.

To the first of the two subdivisions indicated belong the City Courts of Mobile, Montgomery, and Selma, in Alabama; the City Courts of Atlanta, Gainesville, and Savannah, in Georgia; the Criminal Court of Cook County and the City Courts of Alton, Aurora, East St. Louis, and Elgin, in Illinois; the Superior Court of Kennebec County, in Maine; the Superior Court of Grand Rapids, in Michigan; the Court of General Sessions in the city of New York, the City Court of Brooklyn, the Superior Court of the city of Buffalo, and the Courts of Special Sessions for the cities of New York and Albany, in the State of New York; the Criminal Court of New Hanover County, in North Carolina; the Special Criminal Courts in the counties of Davidson and Rutherford (forming one circuit), Knox, Montgomery, Shelby, and Madison, in Tennessee; the City Court of Burlington, and the Municipal Court of Rutland, in Vermont; and the Municipal Courts of Dane and Milwaukee Counties, in Wisconsin. To the second subdivision (jurisdiction exclusive) belong the "Criminal Circuit" Courts of Indiana; the Criminal Court for the counties of Canton, Campbell, Harrison, Bracken, and Pendleton, in Kentucky; the Criminal District Court for the parish of Orleans, in Louisiana; the Superior Court of Cumberland, in Maine; the Criminal Court of Baltimore, in Maryland; the Criminal Court of Jackson County, the Criminal Court of the Sixth Judicial Circuit, the Moberly Court of Common Pleas, and the St. Louis Criminal Court, in Missouri; and the Corporation or "Hustings" Courts, in Virginia. It may be presumed, however, that even where the jurisdiction is concurrent, it is practically exercised (except, perhaps, in cases of the very first importance) by the local rather than by the general court.

The trial jurisdiction of justices of the peace is ordinarily limited to misdemeanors of a low grade. Arkansas, Mississippi, and Missouri, as stated above, are exceptions. But in Georgia, Louisiana, Maine, Massachusetts, and Rhode Island, justices have no trial jurisdiction. In Maine and Massachusetts certain justices (designated by the Governor and specially commissioned) are vested with trial jurisdiction and entitled "trial justices." In Rhode Island one justice in each town (chosen in some cases by the Legislature and in others by the town council) acts as trial justice, and his court is known as a "justice court." In New York justices have no trial jurisdiction as such; but they may try certain offenses in their capacity as courts of special sessions. In Ohio the jurisdiction of justices is limited to violations of city or village ordinances. In the remaining States the class of misdemeanors of which justices have jurisdiction is defined in the statutes either by a list of the offenses triable in justices' courts, or by prescribing the maximum penalty which they are authorized to impose. This maximum is, of course, arbitrary, and varies greatly, the lowest being in Connecticut (seven



dollars, or thirty days), and the highest in Kansas (five hundred dollars, or one year). In Nevada justices try not only misdemeanors, but also violations of corporation ordinances.

A somewhat remarkable feature in the jurisprudence of Maine is the power conferred upon justices of the peace to issue writs of *habeas corpus* in certain cases—a provision not found in the penal code of any other State, except in South Carolina, where two trial justices, acting jointly, may issue writs of *habeas corpus* in like manner and with like effect as judges of any court of record.

The trial of violations of corporation ordinances is intrusted in some States to police justices; in others to police courts, mayor's courts, or recorder's courts, created either under a general law or by special act.

The survival of usages derived from the English system of practice in criminal proceedings is noticeable in several States, particularly in the maintenance of the distinction between the Court of Oyer and Terminer and the Court of General Quarter Sessions, in New Jersey (where the justices of the Supreme Court and of the Court of Common Pleas are *ex-officio* judges of both courts); and of the distinction between the Supreme Court and the Court of Common Pleas in Rhode Island (whose jurisdiction is concurrent, except in Providence County, and the Supreme judges are *ex-officio* judges of Common Pleas). In Delaware the same body of judges constitute the bench, not only of the Superior Court, but also of the Court of Oyer and Terminer and of the Court of General Sessions.

**APPELLATE JURISDICTION.**—There are some striking departures from the ordinary system of appeals from the decisions of inferior courts. In Delaware, an appeal may be taken in a bastardy case directly from a justice of the peace to the Superior Court, which is the court of last resort; but the decisions of the Courts of General Sessions and of Oyer and Terminer, in criminal cases, are final. The peculiar organization of the bench of the Delaware courts has the effect of depriving a convicted prisoner of the right of appeal.

In Colorado, an appeal may be taken from a justice of the peace to the County Court, which has no original criminal jurisdiction, but no appeal lies from the County Court to any other.

In New York and New Jersey, a court known as the Supreme Court is interposed between the inferior courts and the Court of Appeals. Theoretically, the Supreme Court has original criminal jurisdiction; but, practically, it does not exercise it. An appeal lies from its decision to the Court of Appeals. The system of appellate courts in Illinois is somewhat similar; but these courts have no original jurisdiction, criminal or civil. There is a system of district courts in Ohio. The occasion for the creation of these special courts of appellate jurisdiction probably was a desire to relieve the

dockets of the courts of ultimate resort in the States where they exist.

In Texas, the Court of Appeals is the court of last resort in criminal proceedings only; the Supreme Court enjoys the ultimate jurisdiction in civil cases.

**INVESTITURE OF JUDGES.**—There are three modes of investing a judge with the authority pertaining to his office: 1. Election by the people; 2. Election by the representatives of the people; and, 3. Appointment by the Executive.

In one-half the States of the Union the first is the only mode in use; and in seven others a marked preference for this mode is manifested.

Delaware, Maine, Massachusetts, and New Hampshire are the only States in which investiture by appointment is the mode exclusively practiced; but in New Jersey all judges are appointed, except justices of the peace; in Florida, all except mayors; and in Mississippi, all except mayors and justices.

The intermediate method (investiture through election by the Legislature) appears to have the preference in the States of Rhode Island, South Carolina, and Virginia.

In Connecticut and Georgia, a mixed system prevails.

Where appointments are made by the Governor, they are in some States subject to confirmation by the Senate, and in others not. In New Hampshire they must receive the unanimous approval of the Governor's Council, who also sign the judges' commissions.

**TENURE OF OFFICE.**—In Massachusetts, all judges above the grade of trial justices, including even the judges of police courts, are appointed for life. The only other life tenures are those of the judges of the Superior Court in Delaware, and of the Supreme judges in Florida, New Hampshire, and Rhode Island.

The tenure of office of other judges, above the grade of justice of the peace, varies from two to twenty-one years, the longest term being that of the judges of the Supreme Court of Pennsylvania. In the majority of cases it is four or six years.

Justices of the peace are usually elected or appointed for from two to four years; but longer terms are provided in New Hampshire, New Jersey, and Pennsylvania (five years each), in Tennessee (six years), in Delaware, Maine, and Massachusetts (seven years each), and in Florida (eight years).

**REMOVAL FROM OFFICE.**—A judge may be removed from office either by impeachment, by the act of the Governor (whether at his discretion or on address of both Houses of the Legislature), by joint resolution of the legislative body, by the action of a court, or on conviction of crime or of misfeasance or malfeasance in office. Instances of all these modes of removal occur. In some cases no mode of removal is prescribed in the statutes, but it is probable that indictment and conviction would,

in the absence of statutory provision, vacate the seat of any judge upon the bench.

**INITIAL PROCEEDINGS IN CRIMINAL CASES.**—Criminal proceedings may be initiated either by presentment, indictment, information, or sworn complaint.

Prosecutions in inferior courts are usually commenced by complaint; but in some States they may also be begun by information. Indictments may be brought in the police courts of Kentucky, the recorder's courts in New York, the "inferior" courts of North Carolina, and the county courts of Oregon and West Virginia. Indictments may sometimes be brought in a superior court and certified to an inferior, as in Georgia, Illinois, and Texas. In Texas the district court may certify an indictment for trial to a justice of the peace.

In the higher courts the common mode of commencing prosecutions is by indictment; but the State of Wisconsin has abolished the grand-jury system, and substituted proceedings by information or complaint instead of it. In fourteen States proceedings may be commenced either by indictment or information; in several of these the statutes require an indictment in case of a felony or other crime of high grade. In North Carolina, proceedings may be begun by sworn complaint.

The initiation of proceedings by presentment is peculiar to Nevada, Pennsylvania, and Virginia. The statutes of Pennsylvania provide that this mode shall not be adopted in the case of offenses of low grade where the remedy by indictment is adequate and no urgent necessity exists. In Virginia, presentments may

be made even in the county and corporation courts.

**MODE OF TRIAL.**—The mode of trial in all higher courts is by jury.

In certain States no provision appears to have been made by statute for the impaneling of a jury in inferior courts. In others, a jury is summoned only on demand of the accused. Some States have a system by which, in certain courts of minor jurisdiction, trial must be by jury; in others it may be, and in others it can not be, but must be by the court.

**SPECIAL PROVISIONS TO INSURE SPEEDY TRIAL.**—In several States provision has been made for granting to offenders who are willing to plead guilty, or to waive indictment and jury trial, a speedy hearing of the charges against them.

In Colorado, any misdemeanor may appear before a justice and plead guilty.

The same is true in New Hampshire, except that the justice can not receive a plea of guilty in cases where the maximum penalty exceeds a fine of one hundred dollars.

In New Jersey, the court of Special Quarter Sessions (which is in effect a special term of the Court of General Quarter Sessions) may be convened for the trial of alleged offenders who demand a speedy trial and waive indictment and trial by jury.

In Wisconsin, the county judge of each county, in his capacity as an individual magistrate, may receive a plea of guilty, at the request of an offender actually in custody, in any case where the maximum penalty for the offense charged does not exceed five years in the penitentiary.

## D

**DANA, RICHARD HENRY, LL. D.**, an American jurist and author, born in Cambridge, Mass., August 1, 1815; died in Rome, Italy, January 7, 1882. He was son of Richard Henry Dana, the poet and essayist (who died in his ninety-second year), and grandson of Chief-Justice Francis Dana. His early education was received in his native town, and he entered Harvard College in 1832; but, owing to over-devotion to work, and some trouble with his eyes, he was compelled to suspend his studies for a time. His physician having prescribed entire respite from intellectual labor, young Dana resolved to try the benefit of a sea-voyage. He accordingly shipped at Boston as a common sailor, on board a vessel which was bound to California by way of Cape Horn. The remedy proved to be admirably adapted to his case: he fully performed all the duties of the station he had assumed; he recovered his health entirely; and, on his return, wrote a narrative of his experiences and adventures, under the title of "Two Years before the Mast" (1840). This work has been pronounced by universal consent to be the

best and truest picture of sea-life ever written. Resuming his college work, Dana graduated at Harvard in 1837, studied law under Judge Story, and was admitted to the bar in 1840. His career as a jurist and public man was distinguished by qualities of high excellence. He was an eloquent speaker and clear and cogent reasoner, and he was frequently engaged in cases of great importance; such as the legal right to read the Bible in the public schools in Maine; the defense of the slave Shadrach, and subsequently (1854) the more exciting defense of Anthony Burns, another slave; the prize cases for the Government before the Supreme Court, arguing (successfully) the right of the President of the United States to use war powers for the national defense, etc. In 1853 he was a member of the Massachusetts Constitutional Convention, and in politics was one of the founders of the "Free-Soil" party, and an ardent supporter of Lincoln and Grant as Presidents of the United States. In 1859-'60 he made a tour of the world, revisiting California, and visiting China, Japan, Egypt, and returning by way of Europe. In 1861 he



was appointed United States District Attorney for Massachusetts, but resigned in 1865, in consequence of not being in accord with Andrew Johnson and his course in the presidential office. Harvard College conferred upon him, in 1866, the degree of LL. D. He was a member of the Massachusetts Legislature in 1867-'68, but failed of election to Congress, against Ben Butler, in 1868. President Grant nominated him Minister to England, in place of Mr. Schenck, in 1876, but the Senate refused confirmation. The latter years of his life were spent in Europe, in investigating the subject of international law, with the intention of preparing and publishing a treatise on that important branch of legal knowledge.

Mr. Dana was an able writer as well as learned jurist and statesman. Besides his first work (noted above), his chief publications were as follows: "The Seaman's Friend, containing a Treatise on Practical Seamanship (with Plates), a Dictionary of Sea-Terms, Customs, and Usages of the Merchant Service" (1841); a new and revised edition of Washington Allston's "Lectures on Art, and Poems" (1850); "To Cuba and Back," a volume of travels (1859); a new edition, with continuation, of Wheaton's "Elements of International Law" (1866), which excited some unpleasant controversy; "Oration on the Life and Character of Edward Everett" (1865); and "Oration on Lexington Common, at the Centennial Anniversary of the Battle of Lexington" (1875). In addition, Mr. Dana was a contributor to the "North American Review," and wrote frequently for the pages of the "Law Reporter" and the "American Law Review." He delivered a course of Lowell Lectures, was author of numerous speeches, addresses on political and other topics, etc. He was an earnest and active member of the Protestant Episcopal Church, and served faithfully for many years as one of its most efficient laymen.

DARWIN, CHARLES ROBERT. This English naturalist, distinguished as the expounder of the development theory of the organic world, died at the home where he had resided for forty years, Down House, in the village of Down, near Orpington, England, on the 19th of April. He had suffered for some time from weakness of the heart, but was able to do a little experimental work until he was finally prostrated, the day before his death. Charles Darwin, as he usually wrote his name, was born February 12, 1809, at Shrewsbury, where his father was a practicing physician. Robert Waring Darwin, his father, was the third son by his first marriage of Erasmus Darwin, the author of "The Botanic Garden," and was celebrated for the boldness of his speculative views, some of which foreshadowed the famous doctrine of which his grandson became the teacher. Charles Darwin's father was also a thinker in science, and was chosen a Fellow of the Royal Society, but he gave his main attention to his profession. On his mother's side, also, the author of the

theory of descent was descended from a man of original genius, his other grandfather being Josiah Wedgwood, the famous amateur artist in pottery.

Charles Darwin went at the age of sixteen from the grammar-school at Shrewsbury—presided over by Dr. Samuel Butler, author of a text-book of geography, and afterward Bishop of Lichfield—to Edinburgh University. He left there after two years for Christ College, Cambridge, where he took his bachelor's degree in 1831. At Edinburgh he gave some attention to marine zoölogy, and before he left he read two short papers before the Plinian Society, the subject of the first being the movement of the ova of *Flustra*. He is known to have been fond of the sport of fox-hunting in his youth. At Cambridge he was greatly interested in the study of botany.

In 1831 Captain Fitzroy, of the ship *Beagle*, who had just returned from South America, and was commissioned to continue his explorations in a surveying voyage round the world, offered to take with him a naturalist. Darwin volunteered to serve without pay, on the condition that he should have the disposal of the collections, and was accepted. The voyage lasted from December, 1831, to October, 1836. They circumnavigated the globe, visiting Brazil, Patagonia, Chili, Peru, the Galapagos and Society Isles, New Zealand, Australia, Mauritius, St. Helena, and the Cape Verd Islands. No scientist had received more favorable opportunities for original work than fell to the lot of the unknown young naturalist of the *Beagle*; but no corps of scientists on subsequent exploring expeditions have amassed a more copious store of observations than he did single-handed, or have by their combined thought derived from them so many profound and original conclusions. To the reports of the expedition published by Captains Fitzroy and King, Darwin contributed a volume entitled "A Journal of Researches into the Geology and Natural History of the Various Countries visited by H. M. Ship *Beagle*," which was republished separately in 1845. The zoölogical results of the cruise were worked up by him, with Professor Owen and Messrs. Waterhouse, Jenyns, Gould, and Bell as contributing specialists, and published before the narrative in 1840, as was the treatise on the "Structure and Distribution of Coral Reefs" (1842). Two other original treatises, embodying further fruits of his geological observations, were subsequently published, and took rank among the classics of that science—a volume on the "Volcanic Islands visited during the Voyage of the *Beagle*" (1844), and "Geological Observations in South America" (1846). Other memoirs, based upon the opulent store of observations gathered by Darwin, are incorporated in the "Transactions" of the Geological Society, the first in the volume for 1838, and further results are recorded in various papers on botany and entomology. He read a paper before the



Geological Society in 1837, just a year after his return, on the subject of the "Formation of Vegetable Mold," in which he broached a theory that illustrates his singular genius for understanding the processes of nature. The observations on which the theory was founded were begun some time before. He arranged then for experiments which took forty years to mature. The results of these experiments, and the final elaboration of his theory of vegetable mold, were given in the latest work of his life, the volume on "Earthworms," the import of which was given in the "Annual Cyclopædia" for 1881. The discovery of the important relation of the habits of the earthworm to the sustenance of all terrestrial life, like that of the geological significance of the coral zoophyte, exemplifies the originality of Darwin's mind. He was a solitary worker, with his mind bent singly upon the book of nature. No scientific discoverer has owed less to his book-learning, to the premonitions and suggestions of other workers in the same field. His character, too, was elevated above the ambitions, jealousies, and controversial propensities of the ordinary man of science. He struck out new paths of investigation, and the truths which he came upon made less stir than if he had discovered the key to problems for which many were searching. He had so little of the hackneyed ways of the professional scientist that the mass of good work which he had accomplished before his doctrine of evolution divided the scientific world into opposite parties procured him very inadequate recognition. In 1870, when his name was presented for election to the French Academy of Sciences, Emile Blanchard spoke of him as an "intelligent amateur," and Elie de Beaumont of his work as the "froth of science." The younger scientific thinkers of England and Germany had at that time accepted his doctrine of the origin of species, but in France he had few adherents. In 1872 he was defeated a second time, but in 1878 he was triumphantly elected a corresponding member of the French Academy.

Darwin's work on board the *Beagle* won him nothing but credit. The scientists of England recognized him as an accurate, watchful, and sagacious observer. Some, particularly Sir Charles Lyell, in the fertile suggestions strewn through his journal, adumbrations of the great doctrines which he set forth in his riper years, saw the reflections of thoughts which were forming in their own minds, and perceived the marks of an original mind of the highest order. The ingenious and highly important inductions presented in the work on the coral reefs found general acceptance, and have remained the current doctrine until the present day, although essential modifications, suggested by Murray, seem likely now to supplant the original theory. The simple, yet intensely interesting, "Naturalist's Voyage round the World," the first edition of which was published in 1845, made him known to the reading public.

Charles Darwin never recovered from the physiological disturbances produced by seasickness, from which he was almost a constant sufferer during the five years' cruise. It was only by the quietest mode of living, and the carefullest regimen, that he was able to keep himself in moderate health and working order. The periods of reconvalescence from the troublesome fits of indisposition with which he was afflicted he turned to account in pursuing his patient observations and ingenious experiments with nature. In the beginning of 1839, three years after his return, he married his cousin, Emma Wedgwood. In 1842 they took up their residence at Down, Beckenham, in the county of Kent, where he was a magistrate. His pecuniary circumstances were such as to place him above the material cares of life, and to relieve him of the necessity of devoting his energies to supplying the daily wants of his family. About a year before he died he fell heir to the fortune of his elder brother, the faithful friend of Mrs. Carlyle. His tastes were almost purely scientific. In art, music, amusements, literature, politics, or society, he took but slight interest. Charles Darwin's manners and feelings were simple and child-like. In his bearing he was altogether amiable and kind. His modesty and unconsciousness of his own greatness were remarkable. In sending a communication to a journal, he would ask for its insertion with doubting hesitancy. The influence of his kindly attention and sympathy upon young scientific men was incalculable. He was ever ready to listen, suggest, and assist. The influence of his writings, also, was powerful in promoting the modest, conscientious, and generous tone which distinguishes modern scientific discussion in England. His sons, George and Francis Darwin, aided him in the multitudinous researches which he continued without remission to the close of his life.

From the time when he went to reside at Down, Darwin devoted himself to elaborating and testing the theories of the evolution of species, of which hints had been thrown out in his journal of the voyage and other earlier writings. In 1851 and 1853 the Ray Society published a valuable and thoroughly systematic monograph on the family Cirripedia, the group of singular crustaceans known as barnacles and sea-acorns. In another monograph, published by the Philosophical Society, he described the fossil species of the same family. In the year 1859 was given to the world the memorable work in which the Darwinian theory was propounded and elucidated, with its full title, "The Origin of Species by Means of Natural Selection; or, the Preservation of Favored Races in the Struggle for Life."

The doctrine of Darwin is, in general terms, that of the evolution of organic types through the operation of the law of natural selection, or the adaptation of the type to its environment through the survival of the fittest individuals. The elements of this evolution are de-



fined to be the perpetuation through the principle of heredity and the accumulation through the principle of variation of the traits which are best suited to survive the destructive struggle for existence, in which the weaker individuals perish and the old traits brought down from former conditions of life disappear. Ideas of evolution were already penetrating the thought of the time, and were the outcome of the materialistic and utilitarian philosophy which dominated the younger minds of England, where it had its birth. Darwin was naturally not the first, nor the only one, to conceive this great theory, which harmonized with the reigning system of philosophy. Without seeking for the original enunciation of the development hypothesis in the writings of Aristotle or Lucretius, in the philosophical theories of Kant or Laplace, in Goethe's scientific speculations or Buffon's bold guesses, without identifying it with the fantastic theories of Erasmus, or assailing its originality on the strength of the similar views which had been put forth a generation before by the German scientist Lamarck, there were scientific thinkers of Darwin's own time who were ruminating over the same conception. The idea was in the air; and one thinker, Alfred Russel Wallace, had independently arrived at conclusions almost identical. He generously waived the question of precedence when Darwin stepped forth as the teacher of the new doctrine. To collect, systematize, and interpret the mass of evidence which Darwin brought to bear upon the theory, and to deduce those secondary laws which explain the manner of the development of species, were feats which Darwin's genius for investigation and theoretical deduction alone could have accomplished. The theory was at once accepted by many of the leading minds in science. Others contributed additional proofs, particularly Haeckel, whose strong scientific imagination led him further than Darwin's cautious and conscientious spirit would allow his own vigorous theoretical powers to carry him. Haeckel brought valuable corroborative evidence from the science of embryology. New discoveries in paleontology added strength to the hypothesis year by year. But Darwin's own original observations on the production of variations in fowls, pigeons, and rabbits, on sports and hybrids in plants, on the relation of the habits of insects to the fertilization of plants, on the sexual attractions of animals, his work in co-ordinating a host of facts and phenomena, many of them before unnoted, with the terms of his theory, made up a body of proof which left little to be done in the elaboration or the demonstration of the doctrine of natural selection. The discrepancies and inconsistencies in his theories were as clearly perceived by him as by his opponents. His mind was always open to doubts, and more ready to admit objections and accept modifications and qualifications than his more ardent disciples thought right. The new doctrine

was assailed in theological circles with a vehement hostility which is known to all the world. His book on "The Descent of Man, and Selection in Relation to Sex," in which the doctrine was applied to the development of the human species, published in 1871, raised this hostility to a higher pitch, and brought upon the pacific and gentle-souled author a storm of denunciation and angry objurcation. Many eminent men of science withheld their acquiescence in the theory, and were disposed, from religious and philosophical grounds, to give greater weight to the scientific objections. When the bulk of scientific authority ranged itself on the side of Darwin, the theologians admitted the compatibility of the theory of descent with the doctrines of revealed religion more readily than they have some of the fundamental laws of science upon their discovery in less scientific ages.

Darwin published, at short intervals, a series of works embodying his amazingly extensive observations with reference to the development theories, and then, before his death, gave to the world, enforced by a wealth of observations and illustrations, collected through long years, one or two other important scientific discoveries. The law of circummutation in plants (see "Annual Cyclopædia" for 1880) was elucidated in "The Power of Movement in Plants" (1881), and his theory of the influence of earthworms in fertilizing the soil (see "Annual Cyclopædia" for 1881), in "The Formation of Vegetable Mold through the Action of Worms, with Observations on their Habits" (1882). His most important work bearing on the theory of descent, besides those mentioned above, is "The Variations of Plants and Animals under Domestication" (1867). The other works of this category are "The Various Contrivances by which Orchids are fertilized by Insects" (1862); "The Movements and Habits of Climbing Plants" (1865); "The Expression of the Emotions in Man and Animals" (1872); "Insectivorous Plants" (1875); "The Effects of Cross and Self Fertilization in the Vegetable Kingdom" (1876); "The Different Forms of Flowers and Plants of the Same Species" (1877). Darwin's books were filled with an immense assemblage of facts. His method was to pile instance upon instance until the reader forms the conclusion in his own mind. It seems as though his mind had gone through the same process, and only reached the theoretical conclusion after the accumulation of the host of facts. Really, his theories were thoughts of his youth, which he spent his whole life in testing and proving. The combination of such a genius for theoretical speculation, with the spirit of the most patient and exact scientific observer, is an example which has done as much to improve scientific method as his ideas have to stimulate scientific thought. A majority of the scientific world have adopted Darwin's views of the evolution of organic nature. A German bibliographer has enumerated, in a catalogue of 36 pages, embracing 312

authors, the books which have been written about the Darwinian hypothesis.

DELAWARE. STATE GOVERNMENT.—The State officers during the year were as follows: Governor, John W. Hall, Democrat; Secretary of State, James L. Wolcott; Treasurer, Robert J. Reynolds; Auditor, John F. Staats; Adjutant-General, J. Park Postles; Superintendent of Public Instruction, James H. Graves; Attorney-General, George Gray; Secretary of Board of Agriculture, Richard Harrington; State Librarian, R. R. Kenney. Judiciary: Chief-Justice, Joseph P. Comegys; Associate Justices, L. G. Wales, John W. Houston, and Edward Wootton; Chancellor, Willard Saulsbury.

STATISTICS.—The State debt may be stated as follows:

The bonds designated as "Series A," payable on the first day of July, 1886, but redeemable at the option of the State at any time after the first day of July, A. D. 1882.....	\$250,000 00
From which deduct amount redeemed January 1, 1883.....	90,000 00
Balance due "Series A".....	\$160,000 00
The bonds designated as "Series B," payable on the first day of July, 1891, but redeemable at the option of the State at any time after the first day of July, 1886.....	\$300,000 00
The bonds designated as "Series C," payable on the first day of July, 1891, but redeemable at the option of the State at any time after the first day of July, 1891.....	165,000 00
Total amount of bonded debt of the State on the first day of January, 1883, exclusive of the school-fund bond.....	625,000 00
Bond of the State to the school fund, bearing interest at the rate of six per cent per annum, payable on the first day of July, 1906.....	156,750 00
Certificate of indebtedness held by Delaware College.....	88,000 00
Total amount of State debt, January 1, 1883.....	\$864,750 00

#### ASSETS.

The semi-annual interest-bearing investment is as follows, viz.:

Mortgage on Junction and Breakwater Railroad.....	\$400,000 00
Mortgage on Breakwater and Frankford Railroad.....	200,000 00
1,275 shares of Farmers' Bank stock, at \$50.....	63,750 00
20 shares of National Bank of Delaware stock, at \$465.....	9,800 00
Total.....	\$673,050 00

The aggregate investments for the benefit of the school fund amount to \$495,749.

Total investments belonging to general fund.....	\$673,050 00
Aggregate investments for the benefit of school fund.....	495,749 00
Amount due the State from all sources January 1, 1883.....	76,384 83
Cash in the Treasury belonging to the general fund, exclusive of the amount required to pay interest and redeem bonds called for January 1, 1883.....	19,501 60
Total amount of assets.....	\$1,264,684 93
Total debt after January 1, 1883.....	864,750 00
Excess of assets over liabilities.....	\$399,934 93

According to the report of the State Treasurer, the receipts and expenditures, present and anticipated, for the year 1882, were as follow:

RECEIPTS.	
Total amount of actual receipts.....	\$141,238 19
Total amount due the State from various sources, not payable until January 1, 1883.....	87,497 72
Amount due the State from the Breakwater and Frankford Railroad Company, January 1, 1882, arrears of interest on mortgage.....	88,886 66
Total.....	\$217,622 57

DISBURSEMENTS.	
Total amount actually disbursed.....	\$94,259 24
Amount set apart for the redemption of bonds called for January 1, 1883.....	90,000 00
Amount set apart to pay interest on four per cent bonds, due January 1, 1883.....	14,800 00
Amount applicable to school fund derived from investments for the benefit of said fund.....	14,991 50
Amount set apart to pay interest on certificate of indebtedness to Delaware College.....	2,490 00
Total.....	\$216,040 74
Balance of receipts, present and anticipated..	\$1,581 83

The general balance in the Treasury, belonging to the general fund, including all moneys due the State, was \$95,885.98.

Of this amount, \$56,999.32 was presently available.

The school fund was augmented by the conversion of the certificates of loan to the Philadelphia, Wilmington, and Baltimore Railroad Company into cash, \$46,750.

"Without increasing the present rate of taxation," says Governor Hall, in his message to the Legislature, "the school fund may be still further augmented by transferring to the same a certain portion of the revenues of the State belonging to the general fund. The rate at which the bonds of the State are being extinguished warrants the conclusion that, on the first day of January, 1885, after defraying the ordinary expenses of the State government, and redeeming all the bonds embraced in 'Series A,' there will be a surplus in the Treasury belonging to the general fund. The bonds embraced in 'Series B' will not be redeemable until July 1st, A. D. 1886, during which time the surplus will steadily increase by the semi-annual receipts. Now, in order to avoid the existence of an idle and inactive fund in the Treasury, and to utilize the moneys as they are received, I recommend that a portion of the revenues now belonging to the general fund be appropriated toward the support of the free schools of the State. This can be done without postponing the payment of the four per cent bonds beyond the period of their maturity or redeemability."

The Legislature of 1880-'81 made an increased appropriation for colored schools, and during the year ending June 30, 1882, there was an increase of 83 per cent in the number of schools and of 1,124 in the number of pupils. There is a school for colored pupils in every hundred except one in the State. Excluding the city of Wilmington, the receipts for colored schools amounted to \$5,329.02; number of schools, 65; of pupils enrolled, 3,067. These schools are under the charge of the Delaware



Association for the Education of Colored People.

The number of indigent deaf and dumb, indigent blind and insane, and also the number of indigent feeble-minded children now maintained in the various institutions outside of the State, the expense of which is apportioned to the different counties, are as follow :

In the Pennsylvania Institution for the Deaf and Dumb..	1
In the Columbia Institution for the Deaf and Dumb....	10
In the Pennsylvania Institution for the Instruction of the Blind .....	2
In the Pennsylvania Training-School for Feeble-minded Children .....	2
In the Pennsylvania Hospital for the Insane.....	2
Total.....	17

The population of the State as finally returned in 1880, and as compared with the returns for 1870, is as follows:

COUNTIES.	1880.	1870.
Kent.....	32,874	29,804
New Castle.....	77,716	63,515
Sussex.....	86,018	81,696
The State.....	146,608	125,015

Of the population in 1880, 74,108 were males and 72,500 females; 137,140 native and 9,468 foreign born; 120,160 white and 26,448 colored.

Of the population, but 35,965 were not natives of the State. Of the foreign population, 5,791 are of Irish, 1,433 of English, 1,179 of German, 285 of Scotch, and 208 of Canadian birth. Of the native population born elsewhere than in Delaware, 11,059 were from Pennsylvania, 9,562 from Maryland, 2,238 from New Jersey, 1,321 from New York, 642 from Virginia, 264 from Massachusetts, 217 from Connecticut, and 1,194 from various other States of the Union.

There were in the State 38,298 males twenty-one years of age and over, of whom 27,447 were native whites, 4,455 foreign whites, and 6,396 colored. Of persons ten years old and upward, 16,912 were unable to read, and 19,414 were unable to write, of whom 6,630 were native whites, 1,716 foreign whites, and 11,068 colored. There were living in the United States 155,517 natives of Delaware.

According to the census, the State produced 3,894,264 bushels of corn, 378,508 of oats, and 1,175,272 of wheat. Accurate statistics of the yield of peaches and berries are not at hand. There were on farms 21,933 horses, 3,931 mules and asses, 5,818 working-oxen, 27,284 milch-cows, 20,450 other cattle, 21,967 sheep, and 48,186 swine.

The following are statistics of Delaware's manufactures: Number of establishments, 746; capital, \$15,655,822; males above sixteen years of age employed, 10,250; females above fifteen years of age employed, 1,426; children and youths employed, 962; yearly wages, \$4,267,349; value of materials, \$12,828,461; value of products, \$20,514,488. Nine States are inferior to Delaware in manufacturing interests.

The statistics of Delaware's cotton manufactures are: Establishments, 8; capital, \$874,570; spindles, 46,188; looms, 822; officers and operators, 797; bales of cotton consumed, 7,512; pounds, 3,236,184; cost of cotton, \$427,855; pounds of product, 2,867,969; yards, 8,644,028; wages of operatives, \$192,727; value of products, \$871,007.

**POLITICAL CONVENTIONS.**—Under the present Constitution each county has three Senators and seven Representatives in the Legislature, while the population of New Castle County is greater than that of Kent and Sussex together. This inequality furnished the chief local issue in the politics of the year. Both political parties pronounced in favor of a remedy, and Governor Hall, in his message, uses the following language on this point: "The large growth of population and wealth in New Castle County since the adoption of the present Constitution has rendered an increase of representation from that county in the Legislature a necessity. It is your duty, therefore, to adopt such legislation as will result in the accomplishment of this needed change or re-adjustment of the basis of representation in the General Assembly."

The Republican State Convention met in Dover, on the 27th of July, and adopted the following platform:

The Republicans of Delaware, in convention assembled, reaffirm their adherence to the cardinal doctrines of Republicanism as enunciated by our National Conventions. We pledge ourselves anew to those great constitutional doctrines, the enforcement of which has made and continued a government "of the people, for the people, by the people."

We demand a fair and full protection of all American industries, believing that the working-men of America ought not to be compelled, upon unfair terms, to compete with the pauper labor of Europe; a fostering care of our shipping interests, that American commerce may have a living chance on the seas; a just and wholesome reform of the civil service as against the Democratic "spoils" system; a free ballot, fair count, and honest return, as against the shotgun and tissue-paper ballot. We affirm our adherence to the doctrine of equal rights for all men, and local self-government, but declare that we are a nation and not a league; and we believe that free schools and a common-school education are the only sure foundations of a free government.

Deploing the untimely death of our chosen leader, the late President, James A. Garfield, regretting "the deep damnation of his taking off," and embalming him in tearful memory, we tender to President Arthur and his Administration our fullest confidence. Taking office under exceptionally adverse circumstances, at a critical period, his coolness, courage, executive ability, and devotion to the true principles of Republicanism, not only excite our warmest admiration, but demand our unqualified and continued support.

We declare the Democratic party of this State to be unworthy of the continued confidence of its people, because having been so long in power they have become utterly regardless of the wishes of the people, as expressed from time to time in their petitions to the Legislature; they have been extravagant of the people's money, and by a system of accounts, both in State and county finances, have concealed from the people full and accurate knowledge of the public funds; they have been profligate beyond parallel in



their allowances to legislative attachés, attorneys, printers, etc., by which they have created and maintained a Ring at the public expense; they are opposed to the education of the poor man's children, believing that the ignorance of the many is necessary to the maintenance of a few; throwing every obstacle in the way of immigration into this State, they have steadily opposed public improvements; they have neglected to take advantage of the low rates of interest upon which money can be borrowed, and by a system of unwise and injurious taxation have crippled the energies of our people and failed to protect the abundant supplies and advantages with which nature has blessed us; in short, they have illustrated the Bourbon who, learning nothing new, ties us to the dead past, regardless of the magnificent energies and improvements which everywhere surround us; that while nature, climate, situation, proximity to markets, are all favoring our State, we find the one impeding obstacle to be Democratic control. To remedy these evils we declare ourselves to be the Party of Progress and Reform, and affirm our adherence to the following doctrines which we believe to be for the welfare of our people:

Representation on the basis of population is a fundamental principle of true republican government, and ought to be established.

The State should be divided into senatorial and representative districts, and the Senators and Representatives in the General Assembly should be elected in such districts exclusively by the people thereof; and the counties divided into levy court districts, and the commissioners elected exclusively by the people thereof; thus securing the right of the minority to be represented in both these bodies.

All county officers should be elected directly by the people thereof, and their pay should not exceed a reasonable compensation for the service rendered.

Our present judicial system ought to be simplified, so that justice in civil and criminal causes may be more speedily, less expensively, and more conveniently administered.

More liberal exemption laws should be enacted, applicable to all debts hereafter contracted, and in any such enactments it should especially be provided that wages for the current year should be wholly exempt from attachment or execution process.

Our present assessment and collection laws were conceived in sin and born of iniquity; the purposes of their being was and is exclusively to perpetuate the misrule of the Democratic party, and their administration by the levy courts of the several counties has, in pursuance of that purpose, been in derogation of the rights of freemen, costly, unjust, partisan, and dishonest.

That to secure these objects and insure a wise economy in the expenditure of the people's money, and the natural and legitimate growth of our State, the time has come for such a general remodeling of our laws and system of government as to demand a change in the organic law; and we therefore declare ourselves in favor of a convention of the people to so alter and amend the Constitution of the State as will secure that retrenchment and reform so necessary to its growth and prosperity.

Albert H. Curry, of Sussex County, was nominated for Governor, and Washington Hastings, of Wilmington, for Congressman.

The Democratic State Convention met in Dover, on the 22d of August, and adopted the following platform:

*Resolved*, That the results of wise, honest, prudent, and economical administration by the Democratic party of the government of the State of Delaware for many years, are attested by the admirable condition of our finances, combining a State credit as high, with taxation as low, as the richest and proudest of our sisters of the Union.

That with assets exceeding our liabilities our State debt has been rapidly reduced and funded at the most favorable rates of interest, and on terms that place its speedy extinction within control.

That the duty of popular education has been fulfilled by a common-school system steadily improved and liberally sustained.

That strictly complying with public obligation, not a dollar has been lost to the Treasury by the defalcation of a Democratic official.

That security to property and person has been carefully maintained, except in a single case, wherein the rancorous fanaticism of our political opponents defeated the administration of justice, and prevented a shocking crime from being visited with condign punishment.

*Resolved*, That we are in favor of such amendments to the Constitution of the State—either by a constitutional convention or legislative enactments—as may be necessary to reform and improve our judicial system, give to New Castle County a just and fair proportion of the representatives in the Legislature, and correct the many deficiencies of the present Constitution.

*Resolved*, That despite the misrepresentation, falsehood, and abuse poured upon them by the radical press and orators, the laws of Delaware relating to the assessment and payment of taxes afford just and ample facilities for the qualification of every voter—far greater than the registration laws of Pennsylvania and New York under the control of the Republican party.

*Resolved*, That we cherish the free-school system as one of the corner-stones of a good and stable government, and are in favor of its further improvement and development as an educator of the poor as well as the rich; but we denounce, as an obstacle to education, the policy of the Republican party, which looks toward the gradual establishment of mixed schools.

*Resolved*, That the interests of all classes and occupations of the American people demand an early and thorough revision and reform of the present unequal, unjust, antiquated, and obstructive system of tariff laws, and the substitution in lieu thereof of a judicious and moderate arrangement of duties upon imports which will check the growth of monopolies, increase the public revenue, and thereby render other taxes unnecessary, will benefit agriculture, encourage commerce, and revive American shipping, and thus open the markets of the world to our agricultural products and to our manufacturers, and enable them to compete in foreign markets, will secure steady wages and a reduced cost of living to the laboring classes, and tend to avoid the disastrous conflicts between capital and labor which result in large degree from a glutted home market and consequent stoppage of labor and production.

*Resolved*, That the exposure at last of the long-continued and systematic frauds in the postal service; the admitted ruin of our once glorious navy and its recommitment to the hands that destroyed it; the gross and profligate expenditure in every branch of the public service, which attained this year, in addition to the interest upon the public debt, to the fearful sum of \$300,000,000, should warn the people of the necessity of withdrawing the control of the Federal Government from the Republican party.

*Resolved*, That the shameless and cruel exaction by the Republican chairman, Jay Hubbell, of a percentage of the wages of every Federal employé, regardless of age or sex, with his public assurance that such action "is not objected to in any official quarter," involves the entire Republican Administration in the meanness and guilt of his conduct, which should be visited by the condemnation of all honest men.

*Resolved*, That in their retention in places of party trust of Dorsey, the Star Route plunderer, and the advancement of similar notorious and disreputable characters to positions of party leadership in Delaware and elsewhere, the Republican managers have



exhibited a shameless effrontery offensive to the public sense of decency and degrading to American politics.

*Resolved*, That no incident of American politics is more corrupt and discreditable than the proposed bargain and sale of the confidential offices of the United States Senate by the solid Republican party in that body to a disreputable renegade and political adventurer, who qualified himself for the alliance by combining the worst elements of society to accomplish the repudiation of the lawful debt of an ancient and honored commonwealth. And that the open and shameless coalitions made or tendered everywhere throughout the South by the administration with every political prostitute and ready recipient of radical money and official position, deserves and must receive the scorn and contempt of all decent men.

*Resolved*, That we view with apprehension the creation of an overgrown army of officials, and their organized control over and interference with popular elections, by the corrupt use of public money and abuse of their official powers; and that we denounce as fundamentally false and dangerous the present "spoils system" of the Republican party, in relation to public offices, and declare that if our elections are to be fair and free, and the form of our government is to be maintained, the public offices must be filled and administered with a view to honest and efficient public service, and not be made, as they now are, the mere spoils of party conquest.

*Resolved*, That the efforts of all self-respecting citizens of Delaware are due, and are hereby earnestly invited to assist in defeating at the polls a party led and organized as is the Republican party of the State to-day, who seek to control the State not for its true interests, but for the spoils of office and to gratify personal ambition, and rely for their success only upon banded ignorance, race prejudice and profligacy within, and the corrupting power of money gathered from without the State.

Charles C. Stockley, of Sussex County, was nominated for Governor, and Charles B. Lore, of Wilmington, for Congressman.

Charles C. Stockley was born in Georgetown, on November 6, 1819, and received the rudiments of his education at a local school. He supplemented this by a course at a private school in Philadelphia, after which he engaged in mercantile business in that city, and subsequently in Millsboro, Sussex County. While living at Millsboro he was elected County Treasurer, and in 1856 Sheriff. In 1873 he was elected State Senator, and in the second session of his term, in 1875, was made Speaker of the Senate. Of late years Mr. Stockley has been chiefly known as a railroad man. He has been for some years President of the Farmers' Bank of Georgetown. He is a large landholder, and lives on one of his farms, some three miles from Georgetown.

Charles Brown Lore was born at Cantwell's Bridge, now Odessa, March 16, 1831. His father, Eldad Lore, was engaged there in the lumber business. He received a rudimentary education in the public school at Cantwell's Bridge, and after a preparatory course at the Middletown Academy he entered Dickinson College in 1848, and graduated with the honors of his class in 1852.

After leaving college he commenced the study of the law under Judge John K. Findley, of Philadelphia. He served as Clerk of the House of Representatives through the ses-

sion of 1856-'57. Immediately after this he turned his attention to the ministry, and the Methodist Episcopal Conference of 1858 accepted him on trial, and assigned him to the Princess Anne church, in the Snow Hill district, where he preached for one year. At the end of that time Mr. Lore withdrew from the ministry, and, going to Wilmington, resumed the study of the law under the late Chancellor Bates. He was admitted to the bar in November, 1861. In 1869 he was appointed Attorney-General, and held the office five years.

Two Greenback Conventions made nominations, and two Temperance Conventions were held, which made no nominations. The State Grange took action against bribery at elections, and in favor of representation by districts.

The election resulted in the choice of the Democratic ticket. The vote was as follows: Stockley, 16,558; Curry, 14,620; majority for Stockley, 1,938. Lore, 16,563; Hastings, 14,640; majority for Lore, 1,923. The Legislature is unanimously Democratic in the House, and contains but one Republican in the Senate.

DE LONG, GEORGE W., commander of the lost exploring vessel *Jeannette*, perished of hunger with a number of his crew while endeavoring to retreat to the settlements on the Lena River, in Siberia, in the winter of 1881. De Long was an officer of the United States Navy, of the rank of commander. He was born in New York, in 1844. He passed through the course of naval instruction at Annapolis, and rose rapidly in the service to the grade of lieutenant, which he attained in 1869. In 1871 he obtained leave of absence for two years, which he spent in Europe. He married Miss Wolien, at Havre. He was attached to the service of the French line of transatlantic steamers for a time. From 1876 to 1878 he directed the training-ship *St. Mary*, at New York.

De Long had already, in 1874, taken part in the polar expedition of the *Juniata*, under the command of Captain L. Braine. While the vessel was lying at Upernavik, in Greenland, he undertook the perilous task of penetrating farther to the northward, at the head of an exploring party, in the steam-launch *Little Juniata*. He pushed through the ice to within sight of Cape York, where he was hindered from landing by the pack. Scarcely had he returned to the United States when he volunteered and was engaged to lead the *Jeannette* expedition, which was to be fitted out at the expense of the proprietor of the "New York Herald." (For the record of the voyage, and of the hardships and untimely end of the commander and his companions, see GEOGRAPHICAL PROGRESS AND DISCOVERY.)

DENMARK, a constitutional monarchy in Northern Europe. The King, who must be a member of the Lutheran Evangelical Church, which is the state religion, exercises the executive power under the advice of his ministers, who are responsible to the Rigsdag, or Diet.

The Rigsdag consists of two Houses—the Landsting, of 66 members, 12 nominated for life by the King, and the rest chosen for eight years by the indirect system of election; and the Folkething, of 102 members, elected directly by universal suffrage for the term of three years. The dependency of Iceland has its own Constitution and Legislative Assembly, the Althing, with a minister for Iceland, appointed by the King and responsible to the Althing, at the head of the administration.

The present King of Denmark, Christian IX, born April 8, 1818, was appointed to the succession by the Treaty of London of May 8, 1852, and by the Danish law of succession made the following year. He succeeded Frederick VII, November 15, 1863. Prince Frederick, the heir-apparent, was born in 1843.

The present State Council, which was first formed June 15, 1875, is composed as follows: J. B. S. Estrup, Minister of Finance and President; Otto Ditlev, Baron Rosenørn-Lehn, Minister of Foreign Affairs, appointed October 11, 1875; E. V. R. Skeel, Minister of the Interior; J. Seavenius, Minister of Religion and Public Instruction, appointed August 24, 1880; J. M. V. Nellesman, Minister of Justice and for Iceland; N. F. Ravn, Minister of the Navy, appointed January 4, 1879, and since April 1, 1881, Minister of War. The Council acts under the presidency of the King. The Crown Prince has a seat.

**STATISTICS.**—The area and population of the kingdom of Denmark, according to the census of February 1, 1880, were as follow:

DIVISIONS.	Area in square miles.	POPULATION.		
		Male.	Female.	Total.
City of Copenhagen	74	103,852	125,998	234,850
Islands	5,076	425,544	439,824	865,678
Jutland	9,850	432,664	435,947	868,511
Total	21,667	967,960	1,001,679	1,969,089

The total area of the dependencies of the Danish crown, including the inhabited portion only of Greenland, is 758,885 square miles. The population of the Faroe Isles is 11,221; of Iceland, 72,438; of Greenland, about 10,000 (in 1878); of the Antilles, 33,763; making the total population of the dependencies, 127,400. The population of Denmark and its dependencies is therefore 2,096,400 altogether. Including Fredericksberg and other suburbs the population of Copenhagen was 273,323 in 1880. The population of the other chief cities was as follows: Aarhus, 24,881; Odense, 20,804; Aalborg, 14,152; Randers, 13,457; Horsens, 12,652. The inhabitants of the kingdom were all returned as Evangelical Lutherans except 1,363 Reformed, 3,000 Catholics, 3,687 Baptists, 792 Irvingites, 1,722 Mormons, 1,919 of other sects, 3,946 Israelites, and 1,074 of no religion. All were born in Denmark and its possessions except 33,152 of German and 24,148 of Swedish birth, with about 5,000 from

other countries. Emigration is mostly to the United States, and has been considerable for about a dozen years past. There were 765 emigrants in 1868, 4,359 in 1869, 3,525 in 1870, 3,906 in 1871, 6,893 in 1872, 7,200 in 1873, 3,322 in 1874, 2,088 in 1875, 1,581 in 1876, 1,877 in 1877, 2,972 in 1878, 3,103 in 1879, 5,667 in 1880, and 7,985 in 1881.

**COMMERCE.**—The trade of Denmark with the different countries of the world was reported for 1880 as follows in crowns (1 crown = 26·8 cents):

COUNTRIES.	Imports.	Exports.
England	53,061,000	75,994,000
Germany	80,428,000	66,528,000
Sweden	27,762,000	26,718,000
Norway	6,114,000	15,770,000
Russia	10,293,000	1,071,000
Netherlands	6,164,000	1,575,000
Belgium	2,824,000	341,000
France	4,270,000	998,000
Iceland	3,112,000	3,194,000
Greenland	565,000	478,000
United States	17,867,000	1,244,000
Danish Antilles	1,018,000	148,000
Brazil	368,000	6,000
Faroe Isles	429,000	483,000
Other nations	13,081,000	2,014,000
Total	227,886,000	196,557,000

The imports and exports of the different classes of merchandise in 1880, compared with those of 1879, were as follow in millions of crowns and tenths of millions:

ARTICLES.	1880.		1879.	
	Imports.	Exports.	Imports.	Exports.
Alimentary articles	87·3	151·0	75·5	122·6
Raw materials	69·4	21·7	55·2	16·9
Manufactures	58·3	10·4	56·0	7·9
Machinery and other means of production.	12·4	13·4	9·3	10·8
Total	227·4	196·5	199·0	158·1

Navigation reports state that in the coasting-trade 14,813 sailing-vessels, registering 180,580 tons, and 6,426 steam-vessels, registering 164,879 tons, entered Danish ports in 1880; and in transmarine commerce 15,935 sailing-vessels, registering 793,205 tons, and 7,142 steamers, registering 511,987 tons. The merchant fleet of Denmark counted in 1881 3,016 sailing-vessels above 4 tons, aggregating 203,555 tons, a decline of 9,646 tons since 1878, and 202 steamers, of 51,984 tons, an increase of 6,860 tons in the same period.

There were 985 miles of railroad in operation in 1882, of which 775 belonged to the state. The state telegraph counted 2,205 miles of line and 5,840 miles of wire in 1880. The dispatches sent aggregated 1,125,000, of which, besides 37,900 official dispatches, 442,000 were domestic and 644,000 international. The number of letters and postal-cards carried by the post-office was 29,604,000.

**FINANCE.**—The revenues for the fiscal year 1880-'81 (ending March 31st) amounted to 51,745,463 crowns (\$13,868,000), against 47,521,957 crowns in 1879-'80; the expenditures to



47,543,367 crowns (\$12,742,000), against 44,170,634 crowns in 1879-'80. The budget for 1882-'83, voted May 12th, provides for a total expenditure of 52,624,199 crowns (\$14,103,000), and states the revenues at 49,856,050 crowns (\$12,093,000). Of the total receipts, 9,117,000 crowns are raised by direct taxes imposed on land and houses; 30,791,000 crowns are raised by indirect taxation, of which about 20,000,000 crowns come from customs, 7,000,000 crowns from stamps and fees, and 3,000,000 crowns from the excise duty on liquor; 1,176,000 crowns are the net revenues from the domains and forests; 3,134,200 crowns the net profits on the railroads, 840,000 crowns the profits of the Government lottery, 849,000 crowns the interest from the reserve funds, and 1,055,000 crowns the interest on improvement loans. The postal service shows a slight surplus revenue, balanced by a small deficit in the telegraph service. The gross receipts from the railroads are 11,440,200, and the running expenses 8,306,000 crowns. The principal expenses are 9,879,800 crowns for interest on the public debt, 9,004,309 crowns for the army and 5,732,585 crowns for the navy, 7,539,174 crowns for public works, and 2,227,100 crowns for subsidies and advances, about 3,350,000 crowns for pensions and 1,125,000 crowns for the civil list and appanages, 1,340,000 crowns for worship and instruction, 2,500,000 crowns for the administration of justice, 3,000,000 crowns for administration of the finances, and 3,798,000 crowns for extraordinary expenditures in the various departments.

The public debt amounted on March 31, 1880, to 173,326,628 crowns, and the assets of the Government to 98,059,731 crowns, leaving a net indebtedness of 75,266,897 crowns. The funded domestic debt amounted to 156,489,841 crowns, besides 858,914 crowns which were payable. The floating liabilities were 2,074,206 crowns. The foreign debt amounted to 13,903,667 crowns, most of which consisted of English loans borrowed at 4 per cent. The assets comprised 33,117,722 crowns, invested in productive public works; 37,142,992 crowns in loans and securities, constituting the reserve fund; and 27,799,017 crowns in various assets. The total amount expended on the Government railroads up to that date was 72,115,731 crowns.

**ARMY AND NAVY.**—Military service is universal and obligatory, according to the military laws of July 6, 1867, and July 25, 1880. The term of service begins at the age of twenty-two, and lasts sixteen years, eight in the line and eight in the reserve. Not more than six to eleven months of actual service are required from the infantry and twenty months from the cavalry, only enough men being kept with the colors as are necessary for garrison duty. The number of soldiers in the first ban, or active period of service, in 1881, was 35,293: in the infantry, 26,992; cavalry, 2,180; artillery, 4,755; engineers, 1,366. The number in the

second ban, or reserve, was 10,925 infantry and 2,793 artillery, together 13,718. The total war strength of the army, counting officers and men, is 50,522. (See NAVIES OF EUROPE.)

**POLITICAL EVENTS.**—Owing to the large personal power retained by the King in Denmark and the diversity of representation in the two Legislative Houses, Denmark is governed by a ministry which is not in accord with the majority of the Lower House, and a conflict has occurred between the majority on the one side, and the Government and the Upper House on the other. This culminated in a constitutional crisis, the elements of which were described in the "Annual Cyclopædia" for 1881. A compromise on the disputed items in the budget was finally arrived at in May. The Radical majority in the Folkething triumphed in the main points. The increase of official salaries was not granted for those who draw over 2,500 crowns a year, and the deficit of the University of Copenhagen must be covered by drawing on its capital funds or by a loan. The extraordinary outlays for military purposes projected by the ministry were agreed to by the Lower House. The struggle was mainly over the interpretation of the Constitution, the Folkething, which had been twice dissolved and for the third time returned with a Radical majority, claiming the exclusive right to vote the budget, and demanding that its votes on money bills should be simply registered in the Landsthing. The vast plans of the ministers for works of military defense were postponed until the following session. In November, in the early part of the regular annual session, the project was laid before the Diet again, but augmented by several millions. It involves the expenditure of 72,283,500 crowns, to be spread over ten years. The chief items, are 34,000,000 crowns for land fortifications and 13,270,000 crowns for sea fortifications at Copenhagen, 8,800,000 crowns for enlarging the navy, 6,900,000 for a fortress at Helgenäs, on the east coast of Jutland, and 3,425,000 for a navy-yard. The rest is for minor fortifications.

In the primary elections for the Landsthing in September, the Right, the party of the Government, gained largely, carrying many districts which had recently returned Radical delegates to the Folkething.

**FAMINE IN ICELAND.**—The severe polar winter of 1881-'82 caused a famine in Iceland. Owing to the masses of ice which collected on the northern coast, winter temperatures and snow lasted until the autumn of 1882, rendering agriculture impossible in some districts, and destroying large numbers of cattle and ponies, which perished for lack of fodder. In the northern part of the island the hay-crop failed entirely. Epidemics of small-pox and measles increased the distress of the people. Provisions were sent to the suffering Icelanders from England and Denmark. More timely assistance would have been rendered if the reports of the calamity had not been contradictory.



DIPLOMATIC CORRESPONDENCE OF THE UNITED STATES. Very few subjects of importance are embraced in the correspondence of the State Department during 1882. The passage of the act to restrain the immigration of Chinese led to an investigation of its provisions. It seemed to prohibit the transit of Chinese laborers across the territory of the United States, and an inquiry on the part of the Chinese embassy was answered by the following letter in explanation:

DEPARTMENT OF STATE, WASHINGTON, }  
January 6, 1883. }

MR. CHENG TSAO JU, ETC., ETC., ETC.

Sir: On June 28, 1882, the *chargé d'affaires ad interim* of your legation, Mr. Tsu Shau Pang, wrote to me touching the question arising under the act of May 6, 1882, relative to the transit across the territory of the United States of Chinese laborers proceeding to or returning from Cuba and other foreign countries.

I am happy to inform you that this Government has reached the conclusion that the transit through the United States of Chinese subjects, proceeding to or from a third country, is permissible under the act in question, with certain precautions against abuses.

An opinion which I have received from the Attorney-General sets forth the grounds on which this conclusion is reached, which, briefly recapitulated, are as follows:

"The preamble of the act itself reads: 'Whereas, in the opinion of the Government of the United States, the coming of Chinese laborers to this country endangers the good order of certain localities within the territory thereof,' and it is thereupon enacted that the coming of Chinese laborers to the United States be . . . suspended, and, during such suspension, it shall not be lawful for any Chinese laborer to come, or having so come . . . to remain within the United States."

The act is based upon the treaty of November 17, 1880, the provisions whereof it is designated to execute. In that treaty it is premised that "a modification of existing treaties" has become necessary in consequence of the increasing immigration of Chinese laborers and the embarrassments caused by such immigration, and thereupon the Government of China agrees that whenever, in the opinion of this Government, injurious effects are threatened or caused by "the coming of Chinese laborers to the United States or their residence therein," such coming or residence may be regulated, limited, or suspended, but may not be absolutely prohibited. The treaty adds: "The limitation or suspension shall be reasonable, and shall apply only to Chinese who may go to the United States as laborers, other classes not being included in the limitations. Legislation taken in regard to Chinese laborers will be of such a character only as is necessary to enforce the regulation, limitation, or suspension of immigration, and immigrants shall not be subject to personal maltreatment or abuse."

In the views of the Attorney-General, the act of 6th of May, 1880, being intended to carry into effect the stipulations of the treaty, is to be construed in the light thereof, and has reference only to the Chinese who come here to stay as laborers. It is only with immigrants and with those who come as laborers that the treaty and the statute deal. Looking, therefore, at the mischief and the remedy, and to the treaty and the act taken together, this Government, adopting the conclusion of the Attorney-General, does "not think that a Chinese laborer coming to this country merely to pass through it can be considered as within the prohibition of the law, he being neither an immigrant nor a laborer coming here as a laborer."

With regard to the necessity of Chinese laborers in transit being provided with evidence that they are not Chinese coming here as immigrants or as laborers, the Attorney-General says: "As the prohibition of

the act applies to Chinese laborers coming into the country to stay as laborers, and as the regulations touching certificates of identification prescribed by the fourth and sixth sections are auxiliary to that end, and intended to prevent frauds upon the act, and therefore applicable only to Chinese coming here for permanent or temporary residence, I am of opinion that Chinese passing through this country to other countries are not required, before crossing our borders, to produce the specified certificates of identification, provided they competently prove in some other manner their status as mere transient passengers; of course the certificate would dispense with other proof." The character of such proof may very properly be regulated by the Secretary of the Treasury. I have brought the matter in this shape to the attention of the Secretary of the Treasury, and requested that he will frame such regulations as may be necessary to permit the transit of Chinese laborers. As soon as the action of my colleague shall be made known to me I will communicate it to you. Accept, sir, a renewed assurance of my high consideration.

FREDERICK T. FRELINGHUYSEN.

In the "Annual Cyclopædia" for 1881, the correspondence between the United States and Chili and Peru is very fully presented. The change which took place in the administration of the Government by the death of President Garfield, has been followed by a suspension of the measures designed by his Administration. The objects contemplated by him, and the political and commercial relations with the South American states, which it was his aim to establish, have been explained by Mr. Blaine, the Secretary of State at that period, and issued in a periodical published in Chicago. The following are extracts:

The foreign policy of President Garfield's Administration had two principal objects in view: 1. To bring about peace and prevent future wars in North and South America. 2. To cultivate such friendly commercial relations with all American countries as would lead to a large increase in the export trade of the United States, by supplying those fabrics in which we are abundantly able to compete with the manufacturing nations of Europe. To attain the second object the first must be accomplished. It would be idle to attempt the development and enlargement of our trade with the countries of North and South America if that trade were liable at any unforeseen moment to be violently interrupted by such wars as that which for three years has engrossed and almost engulfed Chili, Peru, and Bolivia; as that which was barely averted by the friendly offices of the United States between Chili and the Argentine Republic; as that which has been postponed by the same good offices, but not decisively abandoned, between Mexico and Guatemala; as that which is threatened between Brazil and Uruguay; as that which is even now foreshadowed between Brazil and the Argentine states. Peace is essential to commerce, is the very life of honest trade, is the solid basis of international prosperity; and yet there is no part of the world where a resort to arms is so prompt as in the Spanish-American republics. Those republics have grown out of the old colonial divisions, formed from capricious grants to favorites by royal charter, and their boundaries are, in many cases, not clearly defined, and consequently afford the bases of continual disputes, breaking forth too often in open war. To induce the Spanish-American states to adopt some peaceful mode of adjusting their frequently recurring contentions was regarded by the late President as one of the most honorable and useful ends to which the diplomacy of the United States could contribute—useful especially to those states by securing permanent peace within all their



borders, and useful to our own country by affording a coveted opportunity for extending its commerce and securing enlarged fields for our products and manufactures. Instead of friendly intervention here and there, patching up a treaty between two countries to-day, securing a truce between two others to-morrow, it was apparent to the President that a more comprehensive plan should be adopted if war was to cease in the Western Hemisphere. It was evident that certain European powers had in the past been interested in promoting strife between the Spanish-American countries, and might be so interested in the future, while the interest of the United States was wholly and always on the side of peace with all our American neighbors, and peace between them all.

**GENERAL GARFIELD'S IDEAS.**—It was, therefore, the President's belief that mere incidental and partial adjustments failed to attain the desired end, and that a common agreement of peace, permanent in its character and continental in its extent, should if possible be secured. To effect this end it had been resolved, before the fatal shot of July 2d, to invite all the independent governments of North and South America to meet in a Peace Congress at Washington. The date to be assigned was March 15, 1882, and the invitations would have been issued directly after the New England tour, which the President was not permitted to make. Nearly six months later, on the 23d of November, President Garfield's successor issued the invitations for the Peace Congress, in the same spirit and scope and with the same limitations and restrictions that had been originally designed. As soon as the project was understood in South America, it received a most cordial approval, and some of the countries, not following the leisurely routine of diplomatic correspondence, made haste to accept the invitation. There can be no doubt that within a brief period all the nations invited would have formally signified their readiness to attend the Congress; but in six weeks after the invitations had gone to the several countries President Arthur caused them to be recalled, or at least suspended. The subject was afterward referred to Congress in a special message, in which the President ably vindicated his constitutional right to assemble the Peace Congress; but expressed a desire that the legislative department of the Government should give an opinion upon the expediency of the step before the Congress should be allowed to convene. Meanwhile the nations that received the invitations were in an embarrassing situation, for, after they were asked by the President to come, they found that the matter had been reconsidered and referred to another department of the Government. This change was universally accepted as a practical though indirect abandonment of the project, for it was not, from the first, probable that Congress would take any action whatever upon the subject. The good-will and welcome of the invitation would be destroyed by a long debate in the Senate and House, in which the question would necessarily become intermixed with personal and party politics, and the project would be ultimately wrecked from the same cause and by the same process that destroyed the usefulness of the Panama Congress more than fifty years ago, when Mr. Clay was Secretary of State. The time for congressional action would have been after the Peace Conference had closed its labors. The conference could not agree upon anything that would be binding upon the United States unless assented to as a treaty by the Senate or enacted into a law by both branches. The assembling of the Peace Conference, as President Arthur so well demonstrated, was not in derogation of any right or prerogative of the Senate or House. The money necessary for the expenses of the conference—which would not have exceeded \$10,000—could not with reason or propriety have been refused by Congress. If it had been refused, patriotism and philanthropy would have promptly supplied it.

**THE PEACE CONGRESS.**—Such friendly interventions as the proposed Peace Congress, and as the at-

tempt to restore peace between Chili and Peru, fall within the line of both duty and interest on the part of the United States. Nations, like individuals, often require the aid of a common friend to restore relations of amity. Peru and Chili are in deplorable need of a wise and powerful mediator. Though exhausted by war, they are unable to make peace, and unless they shall be aided by the intervention of a friend, political anarchy and social disorder will come to the conquered, and evils scarcely less serious to the conqueror. Our own Government can not take the ground that it will not offer friendly intervention to settle troubles between American countries, unless at the same time it freely concedes to European governments the right of such intervention, and thus consents to a practical destruction of the Monroe doctrine and an unlimited increase of European and monarchical influence on this continent. The late special envoy to Peru and Chili, Mr. Trescott, gives it as his deliberate and published conclusion that if the instructions under which he set out upon his mission had not been revoked, peace between those angry belligerents would have been established as the result of his labors—necessarily to the great benefit of the United States. If our Government does not resume its efforts to secure peace in South America, some European government will be forced to perform that friendly office. The United States can not play between two nations the part of dog in the manger. We must perform the duty of humane intervention ourselves, or give way to foreign governments that are willing to accept the responsibility of the great trust, and secure the enhanced influence and numberless advantages resulting from such a philanthropic and beneficent course.

**A BRIGHT PICTURE.**—A most significant and important result would have followed the assembling of the Peace Congress. A friendship and an intimacy would have been established between the states of North and South America which would have demanded and enforced a closer commercial connection. A movement in the near future as the legitimate outgrowth of assured peace would in all probability have been a great commercial conference at the city of Mexico or at Rio Janeiro, whose deliberations would be directed to a better system of trade on the two continents. To such a conference the Dominion of Canada could properly be asked to send representatives, as that Government is allowed by Great Britain a very large liberty in regulating its commercial relations. In the Peace Congress, to be composed of independent governments, the Dominion could not have taken any part, and was consequently not invited. From this trade conference of the two continents the United States could hardly have failed to gain great advantages. At present the commercial relations of this country with the Spanish-American countries, both continental and insular, are unsatisfactory and unprofitable. Indeed, those relations are absolutely oppressive to the financial interests of the Government and people of the United States. In our current exchanges it requires about \$120,000,000 to pay the balance which Spanish America brings against us every year. This amount is fifty per cent more than the average annual product of the gold and silver mines of the United States during the past five years. This vast sum does not of course go to Spanish America in coin, but it goes across the ocean in coin or its equivalent to pay European countries for manufactured articles which they furnish to Spanish America, a large proportion of which should be furnished by the manufacturers of the United States.

**WORTH A GREAT STRUGGLE.**—In no event could harm have resulted from the assembling of the Peace Congress. Failure was next to impossible. Success might be regarded as certain. The subject to be discussed was peace, and how it can be permanently preserved in North and South America. The labors of the Congress would have probably ended in a well-digested system of arbitration, under which all future troubles between American states could be quickly,



effectually, and satisfactorily adjusted. Such a consummation would have been worth a great struggle and a great sacrifice. It could have been reached without any struggle and would have involved no sacrifice. It was within our grasp. It was ours for the asking. It would have been a signal victory of philanthropy over the selfishness of human ambition; a complete triumph of Christian principles as applied to the affairs of nations. It would have reflected enduring honor on our own country, and would have imparted a new spirit and a new brotherhood to all America. Nor would its influence beyond the sea have been small. The example of seventeen independent nations solemnly agreeing to abolish the arbitrament of the sword, and to settle every dispute by peaceful methods of adjudication, would have exerted an influence to the utmost confines of civilization, and upon the generations of men yet to come. (For further diplomatic questions, see *PERU*.)

**DISCIPLES OF CHRIST.** The churches included under this name have no official general organization; but general voluntary missionary societies have been formed by the association of a large proportion of them, which are intended to represent the whole body in their peculiar work, and to labor for the propagation of its system and doctrines in the United States and foreign countries. With them are affiliated State and district organizations in the States of Arkansas, Indiana, Oregon, Pennsylvania, West Virginia, Nebraska, Kansas, Iowa, Wisconsin, North Carolina, Michigan, Virginia, New York, California, Missouri, Illinois, Ohio, and Kentucky.

The *General Christian Missionary Convention* met in its thirty-third session at Lexington, Ky., October 19th. B. B. Tyler, of Kentucky, presided. The Board of Managers reported that its total receipts, including the money for the Metropolitan Church at Washington, D. C., and the balance in the treasury at the beginning of the year, had been \$25,934. Not including these amounts, the general receipts had been \$7,428. Besides this, the churches in eighteen States had contributed, through their several State or district organizations, for work within their own borders, \$74,038, making the whole amount contributed for the work the convention seeks to promote \$99,972. The Board of Managers had endeavored to supply evangelistic labor, in whole or in part, in Nebraska, Wisconsin, Kansas, Pennsylvania, West Virginia, South Carolina, Alabama, Mississippi, Louisiana, and Tennessee, through the aid of which 16 churches had been organized and 59 assisted, 580 members added, and 237 persons baptized. The State associations reported 3,612 additions, making the whole number of additions 4,192. The interest of Sunday-schools had been looked after, and the "General Christian Sunday-School Association" had been organized, with 100 members. The board had made an attempt, but unsuccessfully, to carry out the plans of the previous General Convention with regard to a German domestic mission, beginning at Cincinnati, O. It was advised to continue its efforts and sustain such a mission, according as its means should allow, and to

establish missions as soon as practicable in other centers of German population. It was also instructed to continue its co-operation with the church in Washington, D. C., until the house of worship is completed there. Since the society was organized, in 1849, the total contributions to its treasury had amounted to \$194,856, while the State treasuries had received since 1870 \$697,116, making the total contributions of the Disciples for domestic missionary work \$891,973. The number of additions to the churches had been, through the special agencies of the General Convention, since 1858, 17,244, and through the State agencies, since 1870, 56,040, making the total number of additions by missionary effort 73,284. Continued efforts were advised by the convention to extend the system of State organizations. D. R. Dungan, of Iowa, was chosen president of the convention for the ensuing year.

The seventh annual meeting of the *Foreign Christian Missionary Society* was held at Lexington, Ky., October 18th and 19th. Isaac Errett presided. The Board of Managers reported that the total receipts for the year had been \$27,431, about twice the amount reported in the preceding year. Reports were received from the missions in Paris, France, 62 church-members and 130 pupils in the Sunday-school and Bible-class; Copenhagen, Denmark, 12 additions, 112 members of Sunday-school, and 2,000 subscribers for the periodical published by the mission; Bardezag, Turkey, 36 additions; and Southampton, Chester, and Liverpool, England, 120 additions. Two missionaries had been sent to India, with four young women dispatched by the Christian Woman's Board of Missions as Bible-readers. Three men of Armenian birth were preparing for service in the Turkish mission, which, it was stated, was chiefly supported by the churches of Kentucky.

**DISCIPLINARY POWER OF LEGISLATIVE ASSEMBLIES OVER THEIR MEMBERS.** UNITED STATES, ENGLAND, GERMANY. —When the sovereignty of a nation is supposed to reside in the people, the legislative assembly represents that sovereignty constitutionally assembled to declare, in conjunction with the executive, its will on the administration of public affairs. Where this sovereignty is not supposed to reside in the people, it is usually declared to rest in the King, Lords, and Commons, which is simply in the executive and legislative departments of the state—thus forming a "Parliamentary Government." The power of the executive is one of approval or disapproval of the measures adopted by the legislature; it serves as a check upon hasty or unconstitutional action. This disapproval is followed by a reconsideration of the objectionable measure on the part of the legislature, and often by its readoption. Thus the legislative assembly is the mode adopted by the sovereignty of a state by which to express its delib-



erate decision as well on private affairs of a civil nature as on public affairs.

These assemblies are designated by various names. In the United States, the Federal Assembly is called Congress, and consists of a Senate and House of Representatives—the local bodies are known as State Legislatures, and consist likewise of a Senate and House of Representatives; in Great Britain, the legislative assembly is called Parliament, and is composed of a House of Lords and a House of Commons; in Germany, the legislative assembly consists of two Houses, the Bundesrath, or Federal Council, which represents the states, and the Reichstag, or Diet of the Realm, which represents the German nation; in France, it is known as the National Assembly, and is composed of two Houses, the Senate and Chamber of Deputies; in the Netherlands, it is called the First and Second Chambers of the States-General.

**ASSEMBLIES, HOW CREATED.**—The manner of creating these assemblies is not really similar in any two nations. In the United States the members of the House of Representatives of Congress are chosen in districts by universal suffrage. The members of the Senate are chosen by the State Legislatures, each House of which nominates a candidate separately, and unitedly they elect. It is evident that, among the members of an assembly thus created, there is a perfect equality of rights and powers, and an equal independence of each other. This independence and sovereignty, likewise, is limited by the provisions of the Constitution under which the body is created, and the rules of order and of business which it may adopt to regulate and control its actions.

**THEIR POWERS.**—In some sections of the Constitution of the United States, the powers of Congress as a legislative assembly are expressly defined; in others, the steps necessary to be taken for the election and organization of the members into a constitutional assembly are authorized, and certain incidental powers over the conduct of members are granted. It is in accordance with these incidental powers that there have taken place in the Congress of the United States some of the details of the subject now under consideration. The Constitution says: "Section 5. . . but a smaller number (than a quorum) may adjourn from day to day, and may be authorized to compel the attendance of absent members in such manner and under such penalties as each House may provide. Each House may determine the rules of its proceedings, punish its members for disorderly behavior, and, with the concurrence of two thirds, expel a member." "Section 6. . . they shall in all cases, except treason, felony, and breach of the peace, be privileged from arrest, during their attendance at the session of their respective Houses, and in going to and returning from the same; and for any speech or debate in either House they shall not be questioned in any other place."

These general provisions of the Constitution grant the authority to each House of Congress to adopt limited regulations over the conduct of its members. It may be said, on the one hand, that the rules of each House derived their force from this grant, while, on the other, it may be asserted, as a general principle, that no such grant was necessary, and that from the nature and objects of each House when convened the rules of its adoption were of sovereign authority. Indeed, it would seem that many of the rules of the British Parliament are based upon this latter view. In questions of order the appeal is made to precedents as well as to the law; for its rules have not been discussed and voted upon within an hour. Their traces are lost in the centuries long past. Indeed, the principle seems to be established in the United States. Cushing\* does not hesitate to say, "It may be laid down that the establishment, in general terms, of a legislative department, is equivalent to a general grant to each branch composing it, of all the powers and privileges which are necessarily incident to a legislative assembly." On the other hand, Mr. Jefferson† lays down the doctrine that the Federal Government being one of limited powers, neither branch of Congress can exercise any powers but those which are clearly delegated to it by the Constitution; and that until they make a law for that purpose, under that provision of the Constitution which authorizes them to make all laws necessary and proper for carrying into effect the powers vested in them by that instrument, neither House has any authority to commit for contempt. Since this view was presented, more than half a century has elapsed, yet no law has been passed, and commitments have been frequently made. The Constitution itself seems to make a distinction between a grant of power to legislate on specified subjects, and the power incidental to a legislative assembly to preserve its organization, and treats of them in separate sections, whereas Mr. Jefferson does not observe the distinction, but applies to the latter an argument which bears on the former. Cushing regards the doctrine above quoted as established by usage and also by the cases of *Burdett vs. Abbott*‡ and *Anderson vs. Dunn*.§ He also refers to a resolution adopted June, 1777, by the old Congress of the Confederation, in which the power of a legislative body to punish for contempt, as incidental to its power to legislate, was most forcibly expressed and maintained. One of its members had been challenged to fight, in consequence of words spoken in debate, and the following resolution was adopted:

*Resolved*, That Congress have, and always had, authority to protect their members from insult, for anything said or done in Congress in the exercise of their

\* "Law and Practice of Legislative Assemblies," § 542.

† "Manual," § 3.

‡ East's "Reports," vol. xiv.

§ Wheaton's "Collection," vol. vi.

duty, which is a privilege essential to the freedom of debate, and to the faithful discharge of the great trust reposed in them by their constituents.

The challenger was thereupon summoned to appear before Congress to answer for his conduct, and, having appeared in obedience to the requisition, and asked pardon of the House, and of the member challenged, he was discharged.

**EXERCISE OF DISCIPLINARY POWER.**—The exercise of disciplinary power by legislative assemblies is intended to preserve the freedom of speech and punish its abuse, to secure due respect to the assembly and to its separate members, and, in a word, to restrain everything of a disorderly nature and that might interfere with the proper conduct of the business. Some illustrations of the proceedings in the discipline of its members in special cases, by Congress, will serve to show its views on the nature and extent of this power, and the reasons for, and manner of, its exercise.

One of the earliest cases brought up the question of the expulsion of a member of the Senate. John Smith took his seat as a Senator from Ohio on October 25, 1803. On November 27, 1807, a resolution was adopted in the Senate to appoint a committee to inquire and report whether it was "compatible with the honor and privileges" of the Senate that John Smith, against whom bills of indictment for treason and misdemeanor had been found in the Circuit Court of Virginia, should be permitted to hold a seat therein. On December 31st the committee reported a resolution that Smith, "by his participation in the conspiracy of Aaron Burr, against the peace, union, and liberties of the people of the United States, has been guilty of conduct incompatible with his duty and station as a Senator, and that he be, therefore, and hereby is, expelled." The depositions of witnesses were taken, and on April 1, 1808, Smith appeared with his counsel before the Senate, who were ready to hear anything he had to offer why the resolution should not be adopted. The objections urged against the adoption of the resolution were, first, that the Senate had no jurisdiction in the case; second, that the evidence did not warrant its adoption. It was contended that the Senate had no power to inquire into any offense of which one of its members may be accused, that is cognizable in a civil court of criminal jurisdiction. In reply, it was said that every man is equally amenable to the general laws of the land, and liable to be prosecuted and punished in the civil courts; but, when a man is clothed with a legislative character, he is placed in a new relation; and, besides being amenable to the judicial tribunals of his country, he becomes, to a certain extent, responsible for his conduct to that body to which he belongs, and that body has a power to inquire into it, without the aid of a civil court. The question on agreeing with the resolution was determined in the negative,

yeas 19, nays 10; two thirds of the Senators present not concurring therein.

The subject of expulsion was extensively discussed in the Senate in 1862, and several Senators were expelled. On December 10, 1861, a resolution to expel Waldo P. Johnson, a Senator from Missouri, was offered and referred to a committee, who reported on January 10, 1862, that Mr. Johnson had left the United States clandestinely, and every rational presumption was that he had gone to the Confederate States, then at open war with the United States. The resolution of expulsion was adopted by a unanimous vote. Truett Polk, a Senator from the same State, was expelled for similar reasons.

A resolution for the expulsion of Jesse D. Bright, a Senator from Indiana, was referred to the Judiciary Committee of the Senate, who reported, on January 13th, that "the facts charged were not sufficient to warrant his expulsion from the Senate." Notwithstanding this report, he was expelled. He had written a letter to Jefferson Davis, as President of the Confederate States, for the introduction to him of a friend who desired to dispose of what he regarded as a great improvement in firearms. The report of the committee was not approved, and the resolution for expulsion was adopted. All the members of the Senate who withdrew from that body and joined the citizens of the Confederate States were likewise expelled. The question was raised that loyalty did not form a part of the qualification of a Senator under the Constitution, and extensively discussed on January 6, 1862.

In the House of Representatives in 1808, the charge was made that Philip Barton Key, who was a member, was a pensioner of the British Government. But in this case the House made no decision that loyalty was necessary to the qualifications of a person. The power of expulsion has been exercised sparingly by Congress, and chiefly by the Senate, although some instances occurred in the House during the civil war. The ground of these expulsions was expressed by the word "disloyalty," and the question was raised whether it was intended to signify disloyalty to the administration of the Government or to the Constitution. No decision, however, was made.

**EXTENT OF CRIMINAL JURISDICTION.**—The criminal jurisdiction of each House of Congress is understood as embracing the misconduct or disorderly behavior of its own members, as well as misdemeanors and offenses committed by other persons, either against the assembly or the members individually. So members may be guilty of misconduct either toward the assembly, or one another, or strangers. Misconduct of members toward the assembly consists of any breaches of decorum or order, or of any disorderly conduct, disobedience of the rules of proceeding, neglect of attendance, etc.; or of any crime, misdemeanor, or mis-



conduct, either civil, moral, or official, which, though not strictly an attack on the House itself, is of such a nature as to render the individual a disgrace\* to the body of which he is a member. Misconduct of the members toward one another consists of insulting remarks in debate, personal assaults, threats, challenges, etc., in reference to which, besides the ordinary remedies at law or otherwise, the assembly interferes to protect the member who is injured, insulted, or threatened. Offenses by members toward other persons of which the assembly has cognizance, consist of injurious and slanderous assertions, either in speech or by writing. The offenses against a legislative assembly, committed by persons who are not members, embrace all offenses against its members individually, all breaches of privilege, whether personal or collective, and all willful obstructions to its regular proceedings and to the free, independent, and full performance of its various functions. Like every other tribunal, a legislative assembly is authorized to punish persons, whether members or others, who are guilty of any contempt toward it by disorderly or contumacious behavior in its presence, or disobedience of its orders.†

CASES PRESENTED.—Some of these offenses have been acted on by one or the other House of Congress. In 1828 Russel Jarvis committed an assault on the private secretary of President John Q. Adams, in the Rotunda of the Capitol, immediately after he had delivered a message from the President to the House, and while he was proceeding with another message to the Senate. A committee was appointed by the House to investigate the subject, a majority of whom reported that the assault was an act done in contempt of the authority and dignity of the House, involving a violation of its own peculiar privileges. They further declared that the power to punish for contempt was not peculiar to the common law of England; but it belonged essentially to every judicial tribunal and to every legislative assembly; it grew out of the great law of self-preservation. They further said that it was a dangerous power, liable to abuse, and that the House should only exercise it "in cases of strong necessity." For reasons stated in the report, it was recommended that the House suspend further proceedings in the case, which was adopted.

In December, 1795, the House of Representatives, on information given by four of its members, ordered the arrest of Robert Randall and Charley Whitney for "a contempt to, and breach of, the privileges of the House, in an unwarrantable attempt to corrupt the integrity of its members." The facts being proved, Whitney was detained in confinement a fortnight, and Randall three weeks, and was reprimanded by the Speaker. In March, 1796, during the

same session, the Committee on Privileges, through Mr. Madison, reported that James Gunn and Frederick Frelinghuysen, Senators, were guilty of a breach of the privileges of the House in sending and bearing a challenge from said Gunn to Mr. Baldwin, a member of the House from Georgia. From letters addressed to the committee, and reported to the House, containing satisfactory apologies and acknowledgments, any further proceedings were deemed unnecessary, and such report was adopted without division. These two cases, occurring so soon after the adoption of the Constitution, and during the life of its framers, contain an express recognition of the power to arrest and punish.

In April, 1832, William Stanberry, member of the House of Representatives from Ohio, complained, by letter to that body, that he had been waylaid in the street, attacked and knocked down by a bludgeon in the hands of Samuel Houston, for words spoken in his place in the House. A resolution providing that Houston should be taken and held in custody by the Sergeant-at-Arms, subject to further orders, was adopted. During its consideration, Mr. Polk (afterward President) urged as an objection that the resolution asserted the doctrine that the House might punish an act not committed in its presence, or interrupting its proceedings, but without further inquiry would deprive a citizen of his liberty. Mr. Wayne, of Georgia, denied the power of the House, in case of contempt, to proceed by peremptory process, unless the contempt had been committed in its immediate presence. He held that the proceedings of a deliberative body, on the subject of contempts, should be parallel to those observed in a court of justice. But these objections were overruled by the vote. Houston was arrested and tried before the House, and sentenced to reprimand by the Speaker. During the trial the power of the House to punish for contempts was extensively discussed, both as derived *ex necessitate rei*, and from the Constitution. The counsel for the defense (Francis S. Key) said that it must be allowed some limitation of the power to punish for contempts was possible and proper; and if it was not confined to immediate acts of interruption of business in the presence of the House, it would be difficult if not impossible to prescribe any other limit. Lord Holt, an English judge, declared his opinion in favor of limiting this power to offenses committed in the presence of the House (see *Ld. Ray. 938—1st ditto, 10*). The Constitution of Maryland, said the counsel, thus limits the privileges of its legislative bodies (section 12). If the power of the House is admitted thus far, where did it get that power? It was said to be derived *ex necessitate rei* by the British Parliament. This was denied. The Constitution was the source to which the power must be traced, and it is not given there in express words.

Probably the fullest discussion of the power

\* An instance of this nature occurred, a few years ago, in the Lower House of the Ohio Legislature, from which a member, who had been a convict in the State Prison, was expelled.

† Cushing's "Elements."

of Congress to arrest and punish for contempt arose in the case of William Duane, editor of the "General Advertiser or Aurora," of Philadelphia. In his paper of February 19, 1800, he inserted some paragraphs defamatory to the Senate, and having failed in his appearance he was ordered to be committed.\* Suffice to say that each House of Congress has constantly exercised the power of arrest and commitment.

**CENSURE OF THE PRESIDENT.**—In the height of political excitement relative to the removal, by President Jackson, of the Treasury funds on deposit in the Bank of the United States, the Senate, on March 28, 1834, passed a resolution declaring that, in that proceeding, "the President had assumed upon himself authority and power not conferred by the Constitution and laws, but in derogation of both." This is the most extreme declaration which one branch of the Government has ever officially made on the conduct of another. It was a sentence of judicial weight uttered without a judicial investigation; and its personality was, perhaps, removed in a great measure by the fact that it was adopted by the strict vote of the opposing political party. A short time after the adoption of the resolution, President Jackson sent a protest to the Senate, declaring that "the resolution was in substance an impeachment of the President, and its passage amounts to a declaration, by a majority of the Senate, that he is guilty of an impeachable offense." After its presentation Senator Benton gave notice of a motion to expunge the resolution from the pages of the journal. The question he regarded as identical in all its features with the one growing out of the famous resolutions of the English House of Commons in the case of the Middlesex election, in 1768. The House was judged and condemned for adopting a resolution which was held by the subjects of the British crown to be a violation of their constitution and a subversion of their rights. It was expunged after fourteen years of annual motions. It was not until after three years that his motion (Benton's) was successfully presented in the Senate. It then became a resolution to expunge a portion of the record of a preceding Congress, and was carried into effect in the presence of the Senate, immediately after its adoption. Instantly a storm of hisses, groans, and vociferations arose from the left wing of the gallery. The order was immediately given to the Sergeant-at-Arms to seize the disturbers, and the ringleader was brought to the bar of the Senate. This example intimidated the rest.

During the administration of John Quincy Adams as President the question of a proposed mission to a congress of American nations, at Panama, came before Congress. No question, in its day, excited more heat and intemperate discussion, or more feeling between a President and Senate. Owing to some expression

used by John Randolph, in a speech in the Senate, Henry Clay, then Secretary of State, sent to him a challenge. The answer ran thus: "Mr. Randolph accepts the challenge of Mr. Clay. At the same time he protests against the *right* of any minister of the Executive Government of the United States to hold him responsible for words spoken in debate, as a Senator from Virginia, in crimination of such minister, or the administration under which he shall have taken office." Mr. Clay had been erroneously informed that Mr. Randolph waived his privilege. The matter was kept secret until the affair was over, without injury to either, and the Senate took no notice of it.

On occasions such as arise at almost every session, when the passage of a bill is resisted by the minority, and it becomes rather a question of physical endurance, the daily session is often protracted to a late hour of the night, or until the next day. The absentees are often arrested and brought in by the Sergeant-at-Arms, and, in some instances, fines have been imposed, and subsequently, on a satisfactory explanation, they have been remitted.

**LIMITATIONS OF THE FREEDOM OF SPEECH.**—The freedom of speech is regarded as the highest prerogative of a member of a legislative assembly; nevertheless, some arbitrary limitations have been placed upon it in the House of Representatives. The first of these is the previous question. When a motion is made for the previous question, and it is ordered by a majority of members sufficient to form a quorum, it has the effect to cut off all debate, and bring the House to a direct vote upon the immediate question, or questions, on which it has been asked and ordered. It may be asked and ordered upon a single motion, a series of motions allowable under the rules, or an amendment or amendments, or may be made to embrace all authorized motions or amendments, and include the bill to its engrossment and third reading, and then, on renewal and seconding of the motion, to its passage or rejection. Two or three attempts have been unsuccessfully made to adopt in the Senate a rule authorizing a call for the previous question.

An apparent limitation of the freedom of speech is to be found in the rule that "no member shall speak more than once to the same question without leave of the House, unless he be the mover, proposer, or introducer of the matter pending, when he may reply after all other members who wish have spoken." It is safe to say that this rule, in practice, causes no real limitation in the freedom of speech. The House has invariably manifested a willingness to listen to important remarks of members. A rule of the Senate provides that "no Senator shall speak more than twice upon any one question in debate on the same day without leave of the Senate."

Another more serious restriction on the freedom of debate in the House of Represent-

\* "Manual of Parliamentary Practice," by Thomas Jefferson, p. 18.



atives was the adoption of the hour rule, "the largest limitation on its freedom which any deliberative assembly ever imposed upon itself, and presents an eminent instance of permanent injury done to free institutions in order to get rid of a temporary annoyance." \* It was moved on July 8, 1841, as an amendment to the body of rules; and, at the same moment, the previous question was moved and carried. The vote was immediately taken, and the rule established.† The following observations were made by the distinguished Senator Thomas H. Benton, on the nature of this measure:

Certain it is that with our incessant use of the previous question, which cuts off all debate, and the hour rule, which limits speech to sixty minutes (constantly reduced by interruptions); the habit of fixing an hour at which the question shall be taken, usually brief, and the intermediate little time not secure for that question—with all these limitations upon the freedom of debate in the House, certain it is that such an anomaly was never seen in a deliberative assembly, and the business of a people never transacted in the midst of such ignorance of what they are about by those who are doing it.

No doubt the license of debate has been greatly abused in our halls of Congress—as in those of the British Parliament; but this suppression of debate is not the correction of the abuse, but the destruction of the liberty of speech; and that, not as a personal privilege, but as a representative right, essential to the welfare of the people. For fifty years of our Government there was no such suppression; in no other country is there a parallel to it. Yet in all popular assemblies there is an abuse of the liberty of speech, inherent in the right of speech, which gives to faction and folly the same latitude as to wisdom and patriotism. The English have found the best corrective: it is in the House itself—its irregular power; its refusal to hear a member further when they are tired of him. A significant scraping and coughing warns the annoying speaker when he should cease; if the warning is not taken, a tempest drowns his voice; when he appeals to the chair, the chair recommends him to yield to the temper of the House. A few examples reduce the practice to a rule, insure its observance, and work the correction of the abuse without the destruction of debate. No man speaking to the subject, and giving information to the House, was ever scraped and coughed down in the British House of Commons. No matter how plain his language, how awkward his manner, how confused his delivery, so long as he gives information he is heard attentively; while the practice falls with just and relentless effect upon the loquacious members, who mistake volubility for eloquence, who delight themselves while annoying the House; who, insensible to the proprieties of time and place, take the subject for a point to stand on, and then speak off from it in all directions, and equally without continuity of ideas or connection of words.

The measure having succeeded in the House, an attempt was made to adopt it in the Senate. Upon its failure, an unsuccessful effort was made to introduce the previous question.

**PAIRING OFF.**—In 1840 a practice was commenced in the House of Representatives, which has since been designated by the words "pairing off": two members of opposite political

parties agree to absent themselves from the duties of the House, without the consent of the House, and without deducting their per diem pay during the time of such voluntary absence. They do as they please—either remain in the city, refusing to attend to any duty, or go off together to neighboring cities; or separate, one staying and one going; and the one that remains sometimes standing in his place, and telling the Speaker of the House that he had paired off, and so refusing to vote. When the first instance of such a statement occurred, ex-President John Q. Adams, who was then a member of the House, immediately proposed the adoption of the following resolution: "Resolved, that the practice first openly avowed at the present session of Congress, of pairing off, involves, on the part of the members resorting to it, the violation of the Constitution of the United States, of an express rule of this House, and of the duties of both parties in the transaction, to their immediate constituents, to this House, and to their country." This resolution was placed on the calendar to take its turn, but, not being reached during the session, was not voted upon. This practice was soon after established also in the Senate.

A want of space will not permit further consideration of the disciplinary power of Congress, although the subject of the rules of Congress may be said to be continued in the subsequent remarks on the rules of the Parliament of England. Suffice it to say that the rules of legislative proceedings in the United States are essentially the same as those of the British Parliament, from which they have been derived; although, to meet the circumstances of Congress and the legislative assemblies of the States, they have been, in some cases, changed, differently applied, or extended beyond their original intention. Thus in each State the general system of rules is in some features different from the others, yet all are founded upon the essential principles of parliamentary law. (See POWERS OF CONGRESS OVER WITNESSES.)

**ENGLAND.**—The parliamentary system of England is one of the oldest in the world, and its present state is the development of this long period. Blackstone says, "As every court of justice has its laws and customs, some the civil or canon law, others the common law, and others still, special laws and customs, so the high court of Parliament has its general and special laws, which are called the law and practice of Parliament." The procedure of Parliament is based alike on law and custom, and is established in part by precedents, in part by permanent rules and those which are temporary, and finally upon statutes and prerogatives of royalty.

**RULES OF PARLIAMENT.**—Parliament has always attached great importance to precedents, both to demonstrate the existence of its privileges and to fix its rules of procedure; and whenever a dispute arises relative to them,

\* Thomas H. Benton's "Thirty Years in the Senate."

† In its present form, the rule is the last clause of section 2, Rule XIV: "No member shall occupy more than one hour in debate on any question in the House, or in committee, except as further provided in this rule." That is, a member proposing a measure may open and close, occupying an hour at each, if the general debate extends beyond one day.



either with the crown or between the Chambers, it has been the usage to appoint a committee to search for precedents on the subject in question. The standing orders of Parliament are the rules and forms of procedure which have been established from time to time as necessity required. They continue in full force under each Legislature until they are formally repealed. Of these fixed and invariable rules it has been said that "only their strict observance can protect effectually minorities from the abuse and excesses which the intoxication of power can too easily suggest to majorities that are powerful and blinded by fortune." The orders of the session are of less constitutional importance, and are renewed at each session and obligatory only during the session.

The rules of the two Houses are so numerous and of such variety that a classification of them would be quite difficult. Mr. May\* has attempted it by dividing them into two classes—one, comprising those which apply to a member when making a speech; and the other, those which apply to the House. When making a speech, a member can not refer to other debates of the same session, or speak of a bill which is not the order of the day, nor attack a decision of the House, or discredit it; nor allude to discussions in the other House of Parliament; nor use the name of the Queen irreverently, or for the purpose of influencing the debate; nor apply unjust or offensive words to either House, or to their acts; or to certain portions or members of the House in which he is speaking. Regarding the latter, it has been decided to be out of order to say that a member is "loose" in his assertions, or that by his vote he makes himself an advocate of riot and disorder, or is discourteous; or to quote from a journal where it is said that the loyalty of a member is rather a subject for caution, or to ask of a member, for the second time, a question which he has already answered.† No one will be surprised to learn that these rules have not been scrupulously observed, nor how easily they can be violated. In fact, this has been done so often that it has become habitual to elude them by the aid of oratorical artifices or transparent ambiguities. Indeed, although there is no rule of such high importance as the one relating to the relations of the two Houses, yet there is no one that is violated more frequently or with greater impunity.

**LANGUAGE OFFENSIVE TO THE OTHER HOUSE.**—It is otherwise if the language of the speaker is openly offensive to the other House. Such an error should be immediately suppressed, as likely to reach the consideration of Parliament and produce serious dissatisfaction. For this reason the speaker is required on the spot to retract or explain his words, and to offer to the

assembly satisfactory excuses. If he refuses, he incurs vigorous disciplinary penalties. An interesting example of this sort is related by Mr. May.\* "In 1614 the Bishop of Lincoln, Richard Neile, used expressions against the House of Commons which it regarded as offensive, and therefore sent a message of complaint to the House of Lords. The latter replied that the bishop had solemnly protested, on the salvation of his soul, that none of his words had been stamped with malevolent intentions toward the House of Commons; that his protestation had been made with real sentiments of lawful respect and high esteem, and that he had, at the same time, shed tears abundantly, and expressed his grief that his speech had been so misinterpreted and in sense gone far beyond his thought; and further, their lords regarding as satisfactory, this conduct at once so sincere and so humble, assured the House of Commons that if they had understood the language of the lord-bishop as containing imputations of sedition, they would have incontinently stigmatized and chastised him with all desirable severity."

**PERSONALITIES.**—To remove from the debates all appearance of personality, special rules, in each House, prescribe the manner in which each member shall be addressed so as to present simply his official character. Similar rules are in force in each House of Congress of the United States. These are observed not only between political friends but also between political opponents. In the Upper House each lord is designated by the rank he holds, and in the Senate each Senator is designated by the State he represents. A similar designation is given to each member of the House of Representatives; whereas in the House of Commons the member is designated as the member from the district which he represents. If these customs are forgotten by any member in the warmth of debate, and he utters insulting expressions, or unjust imputations, or accuses another of insincerity, or treachery, or evil designs, he will be promptly repressed.

Disorderly words should be immediately noticed, and if a member expresses a desire that action should be taken, the Speaker orders the Clerk to take them down, if it appears that such is the wish of the House. But there is a rule of the House of Commons, that if any member has spoken, or other business intervened, after offensive words spoken, they can not be taken notice of for censure. This is for the common security of all, and to prevent mistakes which must happen. In 1807 the Speaker decided that he could not notice words spoken by Mr. Duigenan, although Lord Howick had immediately risen for a call to order, because another member and the speaker himself had spoken before the House manifested a desire to act on the opprobrious words. Many later instances have occurred. In each House of Congress it is required that the exceptionable words shall

\* Thomas Erskine May's "Parliamentary Practice."

† M. A. Eynart, a member of the House of Representatives of Belgium, has investigated this subject extensively, and his articles, to which we are indebted, appear in the "Revue Générale" of Brussels.—Ed.

\* "Parliamentary Practice."



be immediately taken down in writing that the presiding officer may be better enabled to judge. Instances have recently occurred.

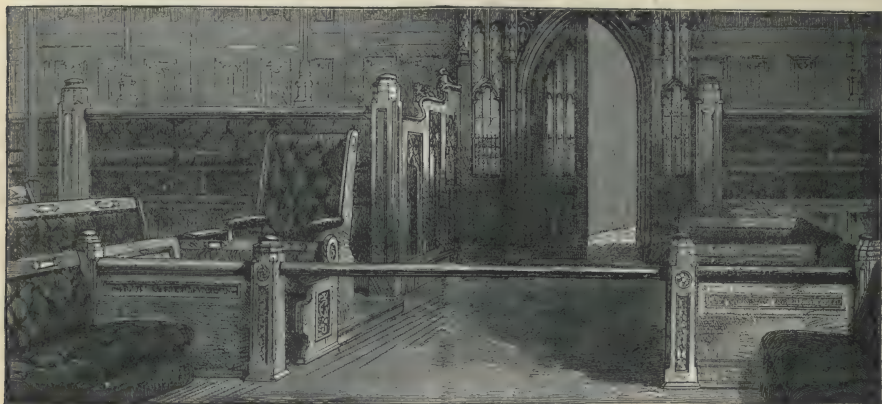
**RULES FOR BETTER ORDER.**—For the better order of the House of Commons, members are required to remain in their places during debate, to enter and go out with decorum, not to cross the House in an improper manner, nor to read books, journals, or letters, nor to break silence, nor hiss or make interruptions. In the House of Representatives of Congress a similar rule requires that, "while the Speaker is putting a question or addressing the House, no member shall walk out of or across the hall, nor, when a member is speaking, pass between him and the Chair; and during the session of the House no member shall wear his hat, or remain by the Clerk's desk during the call of the roll or the counting of ballots, or smoke upon the floor of the House; and the Sergeant-at-Arms is charged with the strict enforcement of this rule." Nevertheless, these rules of the House of Commons are not absolute. It is admitted that the reading of books and journals is not interdicted, when the object is to pass the time agreeably. It is also permitted to speak in a low voice or whisper, and the Speaker will not interfere upon repeated cries of "order," unless the noise of conversations disturbs the debate. So also with regard to hisses, exclamations, or other interruptions, the rule is very often violated. It is not rare to perceive great disorders, which can scarcely be repressed, during the tumult of five or six hundred members waiting with impatience a division of the House. One instance is reported, that a member "crowed like a cock." Nor is the prohibition against interruptions more absolute. These consist in words which can be uttered during debate that do not constitute an infraction of parliamentary rule, yet, by their frequency, and the noise which they occasion, they are very often a cause of disorder. The cries of "Question! question!" "Hear! hear!" have by long tolerance received a sanction in the two Houses of Parliament. The last expression, uttered at the end of a phrase, does not, properly speaking, constitute an interruption. It signifies generally approbation, and is addressed to the orator as a compliment or an encouragement. But such is not always its character or signification; according to the intention of its author, or the intonation of his voice, it can express either disapprobation, derision, or contempt. If it is spoken in the midst of a phrase, or with a shout, it will, more than any other interruption, offend and trouble the orator. At a session on August 6, 1878, Mr. O'Gorman, a member from Waterford, cried, "Hear! hear!" twenty times, during the speech of Colonel Stanley. He was ordered to leave the House, and not allowed to resume his place on the 7th, but on the prayer of his friend Mr. Sullivan. He asked pardon of the House and of the member speaking, and further proceedings were dropped.

**DISCIPLINE FOR VIOLATIONS OF ORDER.**—The disciplinary power of the House of Commons over its members for violations of order is very extensive. The lords are equal in rights, and the president has not been made the judge or guardian of order. But numerous precedents show that both Houses of Parliament have the right to condemn and to imprison for contempt or disobedience of orders, and for breach of privilege. Nor can the prisoner obtain liberty by an appeal to the courts, which have been obliged in such cases to declare that they had no jurisdiction. But while the Upper House has unlimited power, the Lower House can detain a prisoner only until the adjournment of Parliament. He is, however, subject to costs, which are sometimes very heavy. Most frequently the prisoner is released after a short time, either upon his expression of regrets, or upon the request of a colleague. The arrest has often been made to calm the excitement of angry debaters, or to prevent provocations or violence which, it is apprehended, may ensue. On December 10, 1766, words of dangerous freedom having been exchanged between the Duke of Richmond and Lord Chatham, the House of Lords exacted from them a promise, upon their honor, that nothing further should come of their resentment. In 1780 the same House, having learned that Count Pomfret had sent a challenge to the Duke of Grafton, for a cause entirely foreign from parliamentary debates, declared the Count guilty of high contempt toward itself, and imprisoned him in the Tower of London. So, in the House of Commons, if a member refuses to withdraw his insulting words, or the one offended declines to accept the offered excuse, in order to prevent other consequences from the quarrel, both are delivered to the custody of the Sergeant-at-Arms, and do not recover their liberty until they have given to the House an assurance not to resort to any act that would cause regret. In 1780 a dispute arose between Mr. Fox and Mr. Wedderburn, and the former having threatened to leave the House, the Speaker ordered the Sergeant-at-Arms to close all the doors, so that neither of them could go out until they had passed the sponge over their difficulty. A similar occurrence took place in 1836. Sir Frederick Trench and Mr. Rigby Wason being committed to the custody of the Sergeant-at-Arms, were not allowed their liberty until they had given the assurance that their quarrel was ended. The last case of the imprisonment of a member of the House of Commons occurred in 1852. It soon became known, however, that the member, condemned for lack of respect and for acts contrary to order, was insane, and he was placed in an asylum. There remains the case of absentees on a call of the House, who are unable to give a justifiable excuse. This occurs at every session, and is regarded as an act of contempt or disobedience, for it is the constitutional duty of each member of Parlia-

ment to be present in the House to which he belongs.

**PENAL POWER OF THE HOUSE.**—The penal power of the House of Commons extends beyond reprimand or detention; it has the right to exclude from its presence. This right has never been exercised by the House of Lords. It has been questioned by Blackstone, in the first edition of his "Commentaries," but it has been formally established by many precedents. In 1641 Mr. Taylor was expelled, and sentenced to perpetual ineligibility. In the same year Mr. Benson was judged to be always unfit and incapable to hold a seat in Parliament, or to be ever after a member of that House. During the Long Parliament elective disqualification was frequently made a ground for exclusion. At the Restoration in 1660, the House went so far as to join with a decree of expulsion against Mr. Wallop the declaration that he should be henceforth incapable of performing any public service or holding any office in the kingdom. When sentence was to be pronounced on a member, he was placed before the "Bar

Wilkes and assaulted the sheriffs who were charged with the execution of the order, snatched from the flames the unburned sheets of the horrid "North Briton," and bore them in triumph to Temple Bar, beyond the limits of the jurisdiction of the city, and there raised a bonfire into which they threw the remnants of the "North Briton," a bundle of boot-tops, and a petticoat, which were favorite emblems of the last and unpopular minister, Lord Bute. Instead of taking compassion on the follies of the crowd, the House got angry. Wilkes, fearing its wrath, refused to obey its command to appear in his place in Parliament, fled to Paris, surrounded by a pack of spies and exposed to every sort of misery. He was adjudged guilty of contumacy, and condemned to expulsion from Parliament. These events occurred in 1764. On the dissolution of Parliament in 1768, Wilkes returned from his exile and offered himself as a candidate for the City of London. He was defeated, but the remembrance of his misfortunes awakened the sympathies of the people in his favor, and he be-



THE BAR OF THE ENGLISH HOUSE OF COMMONS.

[At the lower end of the floor, beyond the seats of the members, is a line not to be passed, while the House is sitting, by any person who is not a duly elected representative of the people. A brass rod, which slides to and fro across the open space beside the chair of the Sergeant-at-Arms, can be interposed, upon proper occasions, to exhibit the line of demarkation. This is "the bar of the House," to which persons may be summoned, as to the bar of any other high court or tribunal, if there be cause to bring their conduct or their testimony into question.]

of the House," and, in early days, upon his knees. But the practice of kneeling has been long abolished.

**CASE OF JOHN WILKES.**—The last instance in which this exorbitant claim was exercised by the House of Commons was in the repeated expulsion of John Wilkes during the reign of George III. He was an editor and member of the House. He published a little work containing harsh attacks upon the King and his ministers. Forgetful of its privileges, and eager to gratify the royal malice, the House declared the writing of Wilkes to be "a false, scandalous, and wicked libel," and ordered its destruction by fire and by the hand of the public executioner. The populace took up the cause of

came their idol. Without delay he was elected a member from Middlesex by a strong majority. Many accidents, marked by bloody collisions between the people and the military, followed that election. Wilkes published another article against the minister, in which he branded as a "hateful murder" the violent repression of the risings of the people. Turning a deaf ear to the urgent reasons set forth with rare eloquence by Messrs. Burke, Pitt, and George Grenville, the House was obstinate in its conduct, at the time impolitic and hazardous, and declared the second article to be an "insolent, scandalous, and seditious libel," and deliberately voted, by a large majority, the repeated expulsion of Wilkes, and to bind for the second



time the brow of the author with the crown of a martyr, and stubbornly to trample under foot the most incontestable rights of the electors. As Mr. Grenville had predicted, Wilkes was re-elected without opposition. On the next day the House decided that, "having been expelled at this session, he had become and was incompetent to be elected or to sit in the present Parliament." Consequently the election was annulled, but Wilkes was chosen again without opposition and by an increased majority. Then, in order to prevent the fruitless trials, an expedient was devised. Another member of Parliament obtained from the Chancellor of the Exchequer the appointment of "Steward of Chiltern Hundreds," and put himself on the lists against Wilkes. Having been defeated, Mr. Luttrell addressed to the House a protest against the election of his opponent. The House decided that, notwithstanding Wilkes had obtained a majority of the votes—he had received eleven hundred and forty-three votes against two hundred and forty-four—it was Mr. Luttrell who should be declared to be elected, and the count was changed to that end. In vain the electors of Middlesex protested; in vain Burke and Grenville addressed the House with most indignant utterances—it persisted in its decision. The popularity of Wilkes immediately increased in immense proportions; he was elected an alderman of the City of London and a subscription was raised to pay his debts. At the same time a formidable opposition arose against the House of Commons, not only in the judiciary departments, where protests were made in the name of law and right, not only in the House of Peers, where Lord Chatham denounced with his powerful voice the injustice to the electors of Middlesex, but even in their hall George Saville made two efforts, at the risk of his own liberty, to accuse the House of having betrayed the rights of the people. But it was a useless labor; the House continued stubborn in its blind resistance. The City of London, through its magistrates, addressed the King in language stamped with unexampled boldness, showing that "the majority of the House of Commons had deprived the people of their dearest rights," and demanding that the King should consent to restore constitutional government and public tranquillity by dissolving the Parliament and removing from his councils the bad ministers. The King replied that he regretted that any of his subjects had been so far misled as to address to him remonstrances which were disrespectful to himself, injurious to Parliament, and incompatible with the principles of the Constitution. But this new denial of justice did not silence the opposition. Lord Chatham wrote that "no document had ever come from the throne more unconstitutional or more dangerous if it was permitted to pass without a reply." Finally, after incessant efforts repeated at each session by Burke and Saville, after a new Parliament had been chosen and

Wilkes re-elected, the House of Commons, overcome by the evidence of its wrongs as much as by the denunciations of the public, pronounced its own condemnation by opening its doors to Wilkes after eighteen years of proscription, and by erasing from the record its own decision on the subject of ineligibility, as subversive of the rights of the whole electoral body of the kingdom.

**EXPULSIONS.**—Under the later practice of Parliament, according to May, expulsion is generally for such breaches as render a member incapable of holding his seat, and as would injure the respect of Parliament, if they were permitted to pass without punishment. Members have been expelled who had been engaged in rebellion, or were guilty of forgery, perjury, deception, treason, prevarication in judicial office, or in the exercise of their duties as members of the House, or for acts unbecoming an officer and a man of honor, or for injurious writings, or for deeds directed against the House itself. But, at present, great prudence is observed in the exercise of this power. The history of the last three centuries shows that the penalties of Parliament have been successively modified under the influence of manners and political progress. In 1838 O'Connell was charged with accusing, in a public meeting, many of his colleagues as guilty of shameful perjury in the discharge of their duties on an electoral commission. He acknowledged that he had used the expressions, and was declared to be guilty of a violation of privilege, and by a resolution of the House was punished simply by a reprimand from the Speaker. Other instances could be mentioned, but our limits will not permit.

**THE CLÔTURE.**—The *clôture*, or the adoption of some rule by which all debate on a question may be closed, and the House brought to a direct vote, has excited the attention of the English public for some years. Scarcely a session of the Congress of the United States has been held during many years without an effort on the part of the minority in one of the Houses, and usually in the House of Representatives, to defeat the passage by the majority of some important bill, or to secure a special amendment to the same. The bill is generally looked upon by the minority as politically very objectionable, or as containing some very objectionable features. If brought to a final vote it would be quickly passed by the majority, and the object of the minority is to prevent its reaching that vote at all, or until some important amendments have been conceded. Near the close of the session the bill is called up for further consideration, or for its final passage, and the minority commence their efforts for its delay, or defeat, or "obstruction," as it is called in the House of Commons. These consist in numerous speeches, motions to adjourn, on which the yeas and nays are called, and an unlimited number of amendments, each of which can be discussed and voted upon as a distinct question.

There is no termination to such proceedings except through the physical exhaustion of the contestants, or concessions on the part of the majority.

In the session of Parliament of 1877, seven members from Ireland introduced the method resorted to in the Congress of the United States. Their object was to obstruct or to arrest the legislative machinery, and thus demonstrate the absolute necessity of a national Parliament for Ireland. It was in the month of July, and about three weeks remained of the session, and the question was on a bill relating to South Africa. Mr. Parnell, the member from Meath, took the lead, O'Donnell and Biggar followed

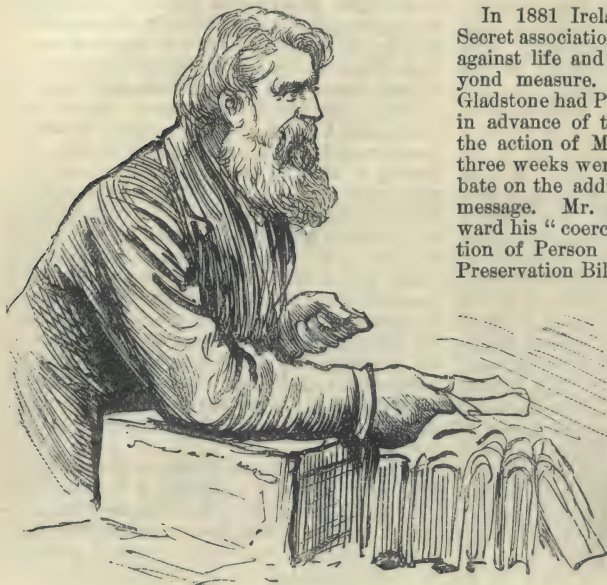
for the rights of minorities and for individual liberty, that it experienced a sense of relief when it was understood that Sir Stafford would not propose any measure of coercion, "as the House was the best judge of its dignity."

During the sessions of 1878 and 1879 similar obstructive measures were used, with far greater skill. At the close of the latter, the London "Economist" said:

So far as relates to general legislation, the obstructionists have made the year entirely unproductive. They have pushed the ministers and the members of the House to such a pitch of impotent rage that their satisfaction should be very great; and through it all, they have acted without any violation of order which could furnish to a watchful and angry majority an occasion, so much desired, to use retaliatory measures.

In 1881 Ireland was extremely agitated. Secret associations covered the land, and crimes against life and property were multiplied beyond measure. In this state of affairs Mr. Gladstone had Parliament convoked one month in advance of the appointed date. Through the action of Mr. Parnell and his colleagues, three weeks were exhausted in an unusual debate on the address in answer to the Queen's message. Mr. Gladstone then brought forward his "coercion bills" for Ireland (Protection of Person and Property Bill, and Peace Preservation Bill). These bills afforded to the House an opportunity to give another illustration of that patience, of that strength of resistance, and of that respect for liberty, which are the foundation of the English character.

The discussion of the bills began on January 25th, at 4 p. m., and the members from Ireland at once entered upon the contest. By the aid of the Speaker, Mr. Gladstone was able to set forth reasons of urgency, which became the question. The



SIR STAFFORD NORTHCOTE SUGGESTS THE SUSPENSION OF MR. PARNELL.

near; afterward came Kirk, Gray, Nolan, and Power, always active, always ready to take the place of those whom an excess of fatigue had obliged to retire for a moment to refresh their wearied powers. The sessions commenced at 4½ o'clock p. m. That of July 24th continued until 2½ a. m.; that of the 25th continued until 6 a. m.; and that of the 31st until 6½ p. m. of the next day. Mr. Parnell and Mr. O'Donnell alone spoke hundreds of times and offered an avalanche of amendments. Mr. O'Donnell had prepared seventy-three; some were identical with propositions already rejected by a formal vote.\* During the session of July 31st, Sir Stafford Northcote suggested the parliamentary suspension of Mr. Parnell for some days. But so great is the respect of the English people

session continued until 2 p. m. of the 26th; it next commenced on the 27th, and adjourned on the 28th; but that of January 31st was the longest. It commenced at 4 p. m. on Monday, and had continued until 9½ a. m. of Wednesday, when Mr. Gladstone entered the House and was greeted with enthusiastic applause. The ministerial benches were immediately filled, the Speaker resumed the chair in place of the deputy Speaker, and immediately addressed the House. Alluding to the condition in which they were placed, and that an important measure, recommended in the speech from the throne a month previous, and declared urgent for the interest of the state by a decisive majority, had been held in check by an insignificant minority, which had resorted to a mode of "obstruction" rated as a parliamentary offense by the assembly, he

\* To furnish a fuller view of the exciting occasion, three sketches from the London "News" are inserted.



said: "A new and exceptional proceeding is imperiously demanded, and I am convinced that I shall better respond to the intentions of the House to refuse permission to any more speakers, and to put the question to vote." The vote was then taken on the introduction and first reading of the "coercion bills," amid incessant and excited cries, by the nineteen Irish members, of "Privilege!" "Privilege!" Mr. Gladstone immediately announced that on the next day he would make the following motion: "When a motion to declare urgency in the state of public business shall have been made, if forty members rise to sustain that proposition, the President shall immediately take the vote of the House on the question. In case the number of 'yeas' shall be larger, a vote by division shall be immediately taken, and if the majority in favor of the proposition is at least three fourths, the powers of the House for the determination of the proceedings during the different stages of a bill shall be delegated to the Speaker, and remain in his hands until he declares there is no longer urgency in the state of public business." These proceedings closed the session of forty-two hours.

At the session which was held in the afternoon, the Speaker was asked what provision of the rules he had executed in closing so hastily the debate. He replied that he had acted on his own responsibility to discharge a duty to the House. A resolution was offered by Mr. Parnell, "that the conduct of the Speaker was a violation of the privileges of the House." The Speaker said it was a question of order and not of privilege, and that there should have been a previous notice of the resolution. In the discussion that ensued the Speaker was sustained by the House—278 votes to 44. The act of the Speaker was practically a *coup d'état*. It would be necessary to search very far back in the history of England to find a similar act, thus violating all traditions, thus repudiating all precedents, and putting one's self in a very flagrant manner in contradiction to the very idea of British liberty:

"Ours is a land of old renown,  
Where freedom slowly broadens down,  
From precedent to precedent."

At the session on the next day fixed for the introduction of Mr. Gladstone's proposition, the House of Commons was invaded by the House of Lords and princes of the royal family. Scarcely had he said a few words, when he was interrupted by Mr. Dillon, one of the Irish members, on a question of order. Amid cries of "Order!" "Order!" on every side, Mr. Dillon said, "Mr. Speaker, I claim my privilege." Whereupon the Speaker decided that he had voluntarily failed in respect for the authority of the Chair. Amid the uproar Mr. Gladstone was heard to say, "I move, conformably to the rule, that Mr. Dillon be suspended from service in this House for the remainder of the session." The Speaker imme-

diately put the question, and the yeas, like a formidable explosion, made the vault of Westminster tremble. The nays were feebly heard. The result was disputed, and a division was



MR. PARNELL OFFERS HIS RESOLUTION.

required. A vote nearly unanimous was given against Mr. Dillon. He refused to retire. The respectable Sergeant-at-Arms then invited him to go. He still refused. The sergeant then touched his arm, but this was not sufficient. Four assistants soon appeared, ready to remove the rebellious member, who, in going out, turned his back to the Speaker, instead of making the usual mark of reverence. No sooner was this scene over, than Mr. Gladstone began to speak, when he was immediately interrupted by Mr. Parnell, and the same scene was repeated. This continued until nine other members were led out, each one protesting against the "illegal and despotic force" to which he was subject. It was 8½ p. m. when the last was out. At 2 a. m. the bill granting extraordinary powers to the Speaker was passed, and urgency was declared, which invested him with those powers.

Nevertheless, these exceptional powers were

insufficient. The "Home-Rulers," as they were called, misled for an instant, soon recovered their way. Scarcely was the *régime* of urgency in force, when Mr. Gladstone anew launched forth bitter complaints at the slow progress of the debate, and called for an increase of measures to hasten its course. Thus the session closed with a formal notice of resolutions to be presented at the following session in October.

The autumn session commenced on October 24, 1882, and Mr. Gladstone brought forward his resolutions as business that had devolved on the Government. He said: "It was generally admitted last year that the efforts of the

of motions, on every day for which they are set down.

It will be seen that the justification put forth by Mr. Gladstone for the action of the Government in taking part in this matter is founded on the *doctrine of necessity*. The affairs of the British Empire, he says elsewhere, "by its extension and concentration, have put a frightful charge upon Parliament, so that this question becomes one of life or death." This doctrine of necessity furnishes always the last reason for a usurpation of power.

The rules of procedure were discussed for a month, and adopted. The following is the text of these new rules:



MR. GLADSTONE BRINGS FORWARD HIS RESOLUTIONS.

House to adjust this matter by conference for themselves in a long series of years had been futile and ineffectual, and that it remained to be considered whether, by putting into operation that degree of influence which the House is always inclined for the public interest to accord to the Government of the day, it might be possible to put the question into a channel which would be more likely to lead to a successful issue." He concluded his speech by moving that the new rules of procedure have precedence of all orders of the day and notices

## I.—PROCEDURE.

### PUTTING THE QUESTION.

1. That when it shall appear to Mr. Speaker, or to the chairman of Ways and Means in a Committee of the Whole House, during any debate, that the subject has been adequately discussed, and that it is the evident sense of the House, or of the committee, that the question be now put, he may so inform the House or the committee; and, if a motion be made "That the question be now put," Mr. Speaker, or the chairman, shall forthwith put such question; and, if the same be decided in the affirmative, the question under discussion shall be put forthwith: provided that the question, "That the question be now put," shall not



be decided in the affirmative, if a division be taken, unless it shall appear to have been supported by more than two hundred members, or unless it shall appear to have been opposed by less than forty members and supported by more than one hundred members.

#### MOTIONS FOR ADJOURNMENT BEFORE PUBLIC BUSINESS.

2. That no motion for the adjournment of the House shall be made until all the questions on the notice-paper shall have been disposed of, and no such motion shall be made before the orders of the day, or notices of motions have been entered upon, except by leave of the House, unless a member rising in his place shall propose to move the adjournment, for the purpose of discussing a definite matter of urgent public importance, and not less than forty members shall thereupon rise in their places to support the motion; or unless, if fewer than forty members and not less than ten shall thereupon rise in their places, the House shall, on a division, upon question put forthwith, determine whether such motion shall be made.

#### DEBATES ON MOTIONS FOR ADJOURNMENT.

3. That when a motion is made for the adjournment of debate, or of the House, during any debate, or that the chairman of a committee do report progress, or do leave the chair, the debate thereupon shall be confined to the matter of such motion; and no member, having moved or seconded any such motion, shall be entitled to move or second any similar motion during the same debate.

#### DIVISIONS.

4. That, after the House has entered upon the orders of the day or notices of motions, when, after the House has been cleared for a division, upon a motion for the adjournment of a debate, or of the House during any debate, or that the chairman of a committee do report progress, or do leave the chair, the decision of Mr. Speaker or of the chairman of a committee that the ayes or noes have it is challenged, Mr. Speaker or the chairman may, after the lapse of two minutes, as indicated by the sand-glass, call upon the members challenging it to rise in their places, and, if they be less than twenty in a House of forty members or upward, he may forthwith declare the determination of the House, or of the committee.

#### IRRELEVANCE OR REPETITION.

5. That Mr. Speaker or the chairman of Ways and Means may call the attention of the House, or of the committee, to continued irrelevance or tedious repetition on the part of a member; and may direct the member to discontinue his speech.

#### POSTPONEMENT OF PREAMBLE.

6. That in committee on a bill the preamble do stand postponed until after the consideration of the clauses, without question put.

#### CHAIRMAN TO LEAVE THE CHAIR WITHOUT QUESTION.

7. That when the chairman of a committee has been ordered to make a report to the House, he shall leave the chair, without question put.

#### HALF-PAST TWELVE O'CLOCK RULE.

[Standing order of the 18th of February, 1879, amended the 9th of May and 20th of November, 1882.]

8. That except for a money bill no order of the day or notice of motion be taken after half-past twelve of the clock at night, with respect to which order or notice of motion a notice of opposition or amendment shall have been printed on the notice-paper, or if such notice of motion shall only have been given the next previous day of sitting, and objection shall be taken when such notice is called.

That motions for the appointment or nomination of standing committees and proceedings made in accordance with the provisions of any act of Parliament or standing orders, motion for leave to bring in bills,

and bills which have passed through Committee of the Whole House, be excepted from the operation of this order.

Provided that every such notice of opposition or amendment be signed in the House by a member, and dated, and shall lapse at the end of the week following that in which it was given.

Provided also that this rule shall not apply to the nomination of select committees.

#### ORDER IN DEBATE.

[Standing order of the 28th of February, 1880, as amended.]

9. That whenever any member shall have been named by the Speaker or by the chairman of a Committee of the Whole House, immediately after the commission of the offense of disregarding the authority of the Chair or of abusing the rules of the House, by persistently and willfully obstructing the business of the House, or otherwise, then, if the offense has been committed by such member in the House, the Speaker shall forthwith put the question, on a motion being made, no amendment, adjournment, or debate being allowed, "That such member be suspended from the service of the House"; and, if the offense has been committed in a Committee of the Whole House, the chairman shall, on a motion being made, put the same question in a similar way, and, if the motion is carried, shall forthwith suspend the proceedings of the committee, and report the circumstance to the House; and the Speaker shall thereupon put the same question, without amendment, adjournment, or debate, as if the offense had been committed in the House itself. If any member be suspended under this order, his suspension on the first occasion shall continue for one week, on the second occasion for a fortnight, and on the third, or any subsequent occasion, for a month; provided always that suspension from the service of the House shall not exempt the member so suspended from serving on any committee for the consideration of a private bill to which he may have been appointed before his suspension; provided also, that not more than one member shall be named at the same time, unless several members, present together, have jointly disregarded the authority of the Chair; provided always, that nothing in this resolution shall be taken to deprive the House of the power of proceeding against any member according to ancient usages.

#### DEBATES ON MOTIONS FOR ADJOURNMENT.

10. That if Mr. Speaker or the chairman of a Committee of the Whole House shall be of opinion that a motion for the adjournment of a debate or of the House during any debate, or that the chairman do report progress, or do leave the chair, is an abuse of the rules of the House, he may forthwith put the question thereupon from the chair.

#### CONSIDERATION OF A BILL, AS AMENDED.

11. That when the order of the day for the consideration of a bill, as amended in the Committee of the Whole House, has been read, the House do proceed to consider the same without question put, unless the member in charge thereof shall desire to postpone its consideration, or a motion shall be made to recommit the bill.

#### NOTICES ON GOING INTO COMMITTEE OF SUPPLY.

12. That, whenever the Committee of Supply stands as the first order of the day on Monday or Thursday, Mr. Speaker shall leave the chair without putting any question, unless on first going into supply on the army, navy, or civil-service estimates respectively, or on any vote of credit, an amendment be moved or question raised relating to the estimates proposed to be taken in supply.

13. That the first seven and the last three of the said resolutions be standing orders of the House.



## II.—STANDING COMMITTEES.

## STANDING COMMITTEES ON LAW AND COURTS OF JUSTICE, TRADE, ETC.

1. That two standing committees be appointed for the consideration of all bills relating to law and courts of justice and legal procedure, and to trade, shipping, and manufactures, which may, by order of the House in each case, be committed to them; and the procedure in such committees shall be the same as in a select committee, unless the House shall otherwise order; provided that strangers shall be admitted, except when the committee shall order them to withdraw; provided, also, that the said committees shall be excluded from the operations of the standing order of July 21, 1856, and the said committees shall not sit while the House is sitting without the order of the House; provided, also, that any notice of amendment to any clause in a bill which may be committed to a standing committee, given by any honorable member in the House, shall stand referred to such committee; provided, also, that twenty be the quorum of such standing committees.

## NOMINATION BY COMMITTEE OF SELECTION.

2. That each of the said standing committees do consist of not less than sixty or more than eighty members, to be nominated by the committee of selection, who shall have regard to the classes of bills committed to such committees, to the composition of the House, and to the qualifications of the members selected; and shall have power to discharge members from time to time, and to appoint others in substitution for those so discharged. The committee of selection shall also have power to add not more than fifteen members to a standing committee in respect of any bill referred to it to serve on the committee during the consideration of such bill.

## APPOINTMENT OF CHAIRMAN.

3. That the committee of selection shall nominate a chairman's panel, to consist of not less than four nor more than six members, of whom three shall be a quorum, and the chairman's panel shall appoint from among themselves the chairman of each standing committee, and may change the chairman so appointed from time to time.

## COMMITMENT AND REPORT OF BILLS.

4. That all bills comprised in each of the said classes shall be committed to one of the said standing committees unless the House shall otherwise order, and, when reported to the House, shall be proceeded with as if they had been reported from a Committee of the Whole House; provided, that the provisions of Resolution 11 shall not apply to a bill rejected from a standing committee.

## DURATION OF RESOLUTIONS.

5. That the four preceding resolutions be standing orders of the House until the end of the next session of Parliament.

THE CLÔTURE IN FRANCE.—In France the *clôture* by a simple majority was not introduced into the rules of the French Legislative Assembly until after the *coup d'état* of December, 1851, when parliamentary government was practically abolished. Under the constitutional government of Louis Philippe, the President of the Chamber or House of Deputies exercised a good deal of authority in directing, limiting, and closing the debates, but this was derived more from custom than written law. Some were more overbearing in their nature and usurped authority; others were quite popular with the members, and their pressure was willingly endured. The president was always re-

garded as a moderator, whose business it was to check excessive garrulity and tediousness, but some have gone so far as to act like masters managing a class of pupils. President Dupin became noted for his arbitrariness. He was a jocular president,\* and hated bores, and often drove them from the tribune by sallies which kept the House in a roar, and which were often more witty than good-natured. A member with a weak voice happening to say that he hoped the whole of France would hear his words, Dupin called out, "You must speak louder than that, sir, if you want to be heard all over France." On another occasion, M. Abraham, deputy for Martinique, had ascended the tribune with a large bundle of notes. Dupin's face assumed a comical air of consternation, and he was heard whispering in a stage aside, "Come, Abraham, make a sacrifice!" The House acquiesced in the use of Dupin's tongue, and his influence in quickening and controlling the debates was immense, but it is noted that he never connived at silencing minorities. On the contrary, so long as the Opposition had anything to say, he insisted that they should have a patient hearing. One day a member of the Extreme Left had risen to speak in despite of an almost unanimous shout of "*Aux voix!*" ("Divide!") Dupin loudly rang his bell. "I really don't understand you, gentlemen," he said; "you are not bound to remain in your seats as I am. If you don't wish to hear the speech to which I am going to be treated, you can take a stroll in the lobbies. I'll send one of the ushers to tell you when the speaker has finished." Again, when Berryer, the great Legitimist orator, was making a fierce attack on one of Louis Philippe's ministers, Dupin, who was an intimate friend of his, though their opinions were antagonistic, exclaimed, "Monsieur Berryer, if you do not moderate your tone, I shall be obliged to call you to order"; but, leaning over his desk, he whispered in the orator's ear, "*Tape dessus!*" ("Pitch into him!") When Louis Napoleon had become master of France, all the regulations touching the new Corps Législatif were framed purposely to keep that body from becoming in any sense a Parliament. Its members were not allowed to initiate laws or resolutions; they might simply speak and vote on measures submitted to them by Government, and even their privilege of moving amendments was restricted by the proviso that no amendment should be debated upon unless it had received an *imprimatur* from the Council of State—a thing never vouchsafed in the case of Opposition amendments. The debates of the Corps Législatif were not public—that is to say, strangers were not admitted to hear them; and newspapers might only publish such condensed reports of them as were supplied by the official "Moniteur." Even these fetters on free speech, however, were not considered enough, and so the *clôture* was contrived as a final gag.

\* Correspondent of the London "Times," February 16, 1882.



The rule about it was that it should be moved for in writing by five members; and, when the motion was put from the Chair, a division was to be instantly taken upon it, unless any member claimed to speak against the motion. But any member so speaking was to limit his remarks strictly to the subject of the *clôture*, and no more than one member could be heard against the motion. The vote was to be taken in the usual way, *par assis et levé* (sitting or rising), unless there were a written demand signed by five members for a ballot; and a simple majority of the members present was enough to pass the motion. When the *clôture* had been voted, the president was bound to stop all further speaking on the main question, and to put that question immediately to the vote. Practically all formalities in moving for the *clôture* were dispensed with when there was an autocratic president in the chair. It became a regular habit with the Government majority to shout for the *clôture* as soon as they understood that ministers desired to silence the Opposition. The president would then say, "There is a demand for the *clôture*," and being answered by an acclamation from the benches of the Right, he would add, before any member of the Left had time to rise, "The *clôture* has been voted." On a certain memorable occasion M. Jérôme David, being in the chair, made so much haste in bringing a debate to a close that the Opposition rose in a body, clamoring that the regulations had not been complied with. M. David, disdaining to argue the point, retired from his chair, ordered the ushers to turn off the gas, and left the Opposition vociferating in the dark. The Opposition was at that time only 23 strong in a House of 360 members; and this is a point worth remembering, for it shows how tyrannically the *clôture* was misused for party ends.

GERMANY.—The Constitution of the German Empire contains a few general provisions relating to the Parliament. It provides especially that its sessions shall be public; that it shall verify the powers of its members; that its proceedings and modes of discipline shall be governed by a regulation or rule of order; that it shall appoint its president, vice-presidents, and secretaries; that a majority can entertain resolutions, but a majority of all the members elected is necessary for their valid adoption.

Excepting the constitutional restrictions, the authority of the Parliament is absolute; it is independent of any initiatory action or final ratification by the Federal Council or the Emperor. At different times the Parliament has exercised this power to modify its order of proceedings, which, borrowed in 1867 from the Prussian Lower House, was afterward adopted without change in the first regular session of the Parliament. Afterward, especially in 1868, 1869, 1870, 1872, and 1874, this regulation of order has been modified somewhat from the original. The Prussian *Landtag* slowly appropriated the definitive regulation,

and thus, excepting some small variations, the proceedings are the same in the two assemblies.

DIVISIONS.—The Parliament is divided by lot into seven sections, composed, as far as possible, of an equal number of members. Each section elects its president and secretary, and the substitutes for each. The sections continue to the end of the session, and they are not renewed by Parliament except on the request of thirty members. The sections have equal authority to choose special committees, of which there are two classes. The first class, six in number, are permanent, and embrace the subjects of regulation, of internal order, petitions, commerce and industry, finances and imposts, justice, and the imperial budget. Generally, only three of these committees are appointed—internal order, petitions, and the budget. The second class contains the committees for special objects. Like the sections, the committees elect their president, secretary, and reporter.

There exist in the Reichstag two other organs which deserve to be mentioned. The first is called (*Seniorenconvent*) Council of Elders. It is neither a special nor general committee, but a permanent body that without regulation comes together on the same day in each year, after the opening of the session. It owes its origin to the traditional custom of Parliament to create compromise committees among the different parliamentary groups in relation to their respective numerical representation. To that end each faction appoints one or more of its members to the Council of Elders, which determines, afterward, the proportionate number of members to accrue to each group in the committees. After the number is once fixed the sections designate the deputies who will belong to the committees. But this is not the only power of the Council of Elders; it may serve as a substitute for the Parliament in deciding the order of the day, and the regular dispatch of business. This function, as important as useful, which it has exercised hitherto without inconvenience or noise, has recently attracted to the Council of Elders the attention of Europe, and, what is certainly more grave, the anger of Mr. Bismarck. Under the foresight that after Pentecost it would not be possible to secure a sufficient number of members for business, the Council of Elders, in concert with the president, Count von Arnim, gave notice that it was expedient to close the session, and in consequence regulated the order of the day. This proceeding is repeated every year; and as the day of adjournment draws near a selection is made of the matters which are important, and they are put in the orders for the day, and the rest go over to the next session. Now, at the time above alluded to, the Council of Elders had taken the great liberty to include, in the business laid over, the bill providing for new taxes, which were indispensable to Mr. Bis-

mark to cover the increase of expenses resulting from the war.

The second organ is of a still more special character. It is a committee appointed by the president for each legislative period, and having charge of the management and care of the library.

**PROCEEDINGS.**—As in many other legislative assemblies, each bill has three readings, and when the debate is closed the vote is taken by sitting and rising. When the result seems doubtful, either to the president or one of the secretaries, it is repeated. If this is not decisive, a count is made. For this purpose the president requests the members to leave the hall. All the doors are then closed, except one on the east side and one on the west side of the hall. At each two secretaries stand, and on a signal the members enter and are counted, the affirmative by the east door and the negative by the west. On a signal, the vote is closed and the doors opened.

The article of the Constitution which required an absolute majority for the passage of resolutions originally contained an exception, that where the matter under consideration was not of common interest to the whole empire, it could be submitted to the votes of the deputies elected from the states of the confederacy which were concerned in it. But this special provision has yielded before the growing tendencies of centralization, and was abolished in 1873. At the same time the constitutional provision is interpreted in a restricted sense. It is applied only to resolutions of the Reichstag, and it has always been understood, in practice, that it did not extend to subjects of deliberation. The Parliament has even gone further, and allowed the question on resolutions to be taken, without regard to the number of members present, not only when these resolutions were without importance, but even more formal ones, where the decision was by rising and sitting.

**ABSENTEEISM.**—This is a serious evil in the German Parliament. This is especially true at the opening of the sessions, and at certain periods when several Diets convene at the same date with the Parliament. At a recent session the attendance was so small and so irregular that on several occasions the assembly was obliged to adjourn. On April 20, 1880, of 397 deputies that composed the Reichstag hardly fifty were present at the commencement of the sitting, and the number was not increased to the close. On April 24th not less than 254 failed to answer on the call, and it was stopped; at evening hundreds of telegrams were sent in all directions, through fear that on the morrow the same spectacle of empty benches would be presented. The presence of the Chancellor (Bismarck) at the debates, however, awakens curiosity, and fills the benches. It was therefore suggested, as a remedy for the evil, that he should be required to be present.

**ORDER OF SPEAKING.**—The rule of the Parliament does not require, like that of the Prussian Landtag, that a list of the speakers should be made, but any one can address the House on obtaining the assent of the president, who grants it to the deputy first to ask after the opening of debate, or after the close of any speaker. Neither is any alternation of speakers *for* and *against* a question required, as the debate is not limited, and one may speak many times on the same subject. Nevertheless, if there is no official list of the speakers, a roll of their names is still made before the debate opens, which is kept by one of the secretaries. This, however, has no validity in regulating the order of the speakers, which is determined by the practice of a number of sessions. The political parties specially interested in the debate determine in their preparatory meetings the deputies who are to speak in their name. These are written at the desk of the clerk, and the president of the group takes care to prevent the names afterward to the attention of the President of the House. This is sufficient to secure the opportunity for them to speak immediately after the authors of the questions. The president treats the names of speakers of other groups in the same manner, and assigns the liberty to speak, according to his judgment, or the necessities of the debate, to deputies who have been urgently recommended to him or with whose special qualifications he is acquainted, but in such a manner that a speaker for or against the question is alternately heard. After the first series of speakers has concluded, if the discussion is not exhausted, a second series of speakers is called in the same manner. The advantages and disadvantages of this practice can be seen at once. It elevates the debate above the hazards of the lists, and gives to the leaders of a party and the most distinguished or technical speakers an opportunity to address the House when it is disposed to give full attention. It is very favorable to the Opposition, since all the political groups are certain of an opportunity to present their dissenting opinions. But, in return, the equality of Parliament ceases to exist. At least, it becomes difficult for the common deputies to speak contrary to the understanding between the political leaders and the President of Parliament, as the close (*clôture*) is generally pronounced before their turn is reached. On the other hand, the discretionary power given to the president seems to be ill-suited to his duties.

The speakers can address the House from the tribune, or any place which they prefer. The rules relating to them require that, when one disturbs the order, the president shall call him by name. He can then make a written protest, whereupon the House at the following sitting will decide without debate if the call was just. If a tumult is raised in the House, the president can suspend the sitting for a fixed time or close it. If he can not make himself



heard, he covers himself, by which act the sitting is suspended for an hour. The rules in general are similar to those of other parliamentary bodies, such as introducing in debate the person of the sovereign, etc. Interruptions, although prohibited, are generally tolerated.

**NUMBER OF GROUPS.**—An interesting feature of the Reichstag is the great number of groups of which it is composed. These arise from the various social, religious, and political ideas which the deputies entertain, and result in depriving the House of any decisive majority. Bismarck recognizes only two parties in that body—the friends and the enemies of the Empire. The deputy Richter, addressing a body of Progressive electors in Berlin, said, “The Chancellor puts the Constitution topsyturvy, and accuses all those who do not obey him on the spot as the enemies of the empire.” All parties, even the Conservatives, have been subjected to this imputation, which has also been launched against the most remarkable men of the Parliament. It is a classification purely fictitious, and springs from the chagrin or strategic policy of Bismarck.

Commencing with the Conservatives, the first division is into German Conservatives and Liberal Conservatives, or party of the Empire. The first group is born of a fusion of two Conservative factions, the Old Conservatives and the New Conservatives, whom simple shadows have for a long time divided in their common attachment to the monarchy, and to the social and religious traditions of the state, and who are finally united in the purpose to oppose the most effective resistance to liberalism. The second group, as its name indicates, is composed of hybrid elements, taken confusedly from the ranks of the old Liberals and Conservatives, and bound together by ardent sympathies for the centralizing ideas of Bismarck. These Liberal Conservatives serve, so to say, for transition between the Conservatives and the National-Liberals, with whom they have often moved together. Liberalism, like conservatism, comprises two groups, of which the first contained recently, under the name of National-Liberals, the greater portion of the Progressist sticklers and the Democrats of different degrees, of the period of the war, who went over to Bismarck on the day after the battle of Sadowa, and became the chief supporters of his military, financial, and religious policy. The National-Liberals are really divided into two divergent factions. The second liberal group is composed of the rest of the Progressists who have adhered to the flag of radicalism since 1866. Above the Progressists and below the Socialists there is a handful of men equally devoted to radical ideas, and who, although adherents to the empire entirely, have their center of action at Frankfort-on-the-Main. These are the Democrats, whose leader is the editor of the “Frankfort Journal.” The Center holds a place apart in German politics. As far back as 1852 a Catholic faction was

formed in the Second Prussian House. It contained sixty-two members, who belonged chiefly to Westphalia and the Rhine Province. The Center extended itself from the Prussian *Landtag* to the Reichstag, where it received new recruits from the confederated states, after having its ranks increased in consequence of the *Kulturkampf* war.

Besides these parties, there are many others whose political significance is as restricted as their partisans are few. The Poles always unite with the Center; the Alsace-Lorraine members side with the Independents and Protestationists; the Hanoverian Particularists unite generally with the Center, and there is another fraction composed of extreme Independents and Progressists. The last group, insignificant in numbers, and more clamorous than all the others, is the Socialists. This party has been steadily advancing since 1870.

**GENERAL ASPECT.**—The German Parliament, in the opinion of M. Reynaert, is one of the most grave and agreeable of legislative assemblies, although it may not realize the ideal of quiet and decorum. He says: “During debate silence is not always strictly observed, especially during great oratorical contests, when the spirit sparkles and gushes dazzling from heated brains; the interjections, the interruptions, the exclamations of every sort, expressive of the most diverse sentiments, are *vive*, noisy, and often roaring. Nevertheless, it would be incorrect to pretend that, in this respect, the German Parliament was inferior to other great legislative bodies, especially the Prussian or Italian Assembly, and, above all, the French House of Deputies. In other respects the *Reichstag* is generally marked by calmness, dignity, and benevolence. Perfect freedom of opinion is allied with the most scrupulous respect for the views of another. The temper of the House is neither violent nor quarrelsome, and the discussion seldom reaches personality or invective. During the thirteen years of its existence there has not been a challenge to a duel, or a disturbance that has caused a suspension of the session. Yet that interval is full of events as decisive for Germany as of grave debates and irritating questions touching the heart of the nation. After the creation of the Confederacy of the North, the empire followed in consequence of a terrible war, Alsace and Lorraine were incorporated, and, after various efforts, reconstituted on a new basis; the seven years’ military law was established, many times renewed and aggravated; public taxes constantly changed and increased; the mercantile policy completely overthrown by the sudden substitution of protection for the mitigated revenue system; socialism attacked boldly and repressed at all points by measures of excessive severity; and last, but not least, the *Kulturkampf* and the odious laws imposed in its name upon the empire by Prussia.”

**DOMINION OF CANADA,** the united provinces of Ontario, Quebec, Nova Scotia,

New Brunswick, Manitoba, British Columbia, and Prince Edward Island, brought together under one Parliament under the British North America Act of the British Parliament in 1867. The act contains provisions for the admission of Newfoundland into the Dominion. The other parts of British America are administered as a Territory by the Dominion Government. The Parliament consists of a Senate with seventy-seven members, nominated for life by the Governor-General, and a House of Commons with two hundred and eleven members, elected for five years. The system of government is substantially the same as that of Great Britain. The suffrage is restricted in Ontario and Quebec to householders possessing or occupying real estate of \$300 assessed value, or of the yearly value of \$30, in cities and towns; or of \$200 value, or \$20 rental, in other districts. The other provinces have similar property qualifications. Voting is open except in New Brunswick, where it is by ballot. The executive authority is exercised by the Governor-General, under the advice of his Privy Council, in the name of the Queen. The seven provinces have each its local Parliament and its administration presided over by a Lieutenant-Governor.

The present Governor-General of Canada is Sir George Douglas S. Campbell, Marquis of Lorne, the heir to the duchy of Argyll, and a son-in-law of the Queen. He entered upon his office December 7, 1878. The Prime Minister is Sir John Alexander Macdonald, who holds the portfolio of the Interior Department. He was the first Prime Minister of the Dominion, holding office from 1867 to 1873, when he made way for Mackenzie, the head of the Liberal party. He returned to power in 1878,

when the Conservatives won the elections on the platform of a protective or "national" policy. The other members of the Privy Council are Sir Charles Tupper, Minister of Railways and Canals; Sir Samuel Leonard Tilley, Minister of Finance; Louis A. W. McLellan, President of the Council; Sir Alexander Campbell, Minister of Justice; A. P. Caron, Minister of Defense and Militia; James Colledge Pope, Minister of Fisheries and Marine; John Henry Pope, Minister of Agriculture; Hector Louis Langevin, Minister of Public Works; James Cox Aikins, Secretary of State; Mackenzie Bowell, Minister of Customs; Joseph Philipppo R. A. Caron, Minister of Inland Revenue; John O'Connor, Postmaster-General.

CENSUS.—From the Dominion census of 1881 the following figures are taken:

PROVINCES.	Area.	Population.	Males.	Females.
	Sq. miles.			
Prince Edward Island.....	2,138	108,591	54,729	54,162
Nova Scotia.....	20,907	440,572	220,583	220,084
New Brunswick.....	27,174	821,283	404,119	417,114
Quebec.....	158,688	1,850,027	978,175	871,852
Ontario.....	101,736	1,923,225	976,470	946,755
Manitoba.....	123,805	65,954	32,207	28,747
British Columbia.....	841,305	49,450	25,503	19,956
Territories.....	2,665,252	56,446	28,118	28,338
Dominion.....	3,470,398	3,324,810	1,688,854	1,635,956

The population of Manitoba within its old limits was 49,502; of the extension, 16,452. [Vancouver Island comprises 16,000 square miles of the territory of British Columbia, and 17,292 of its inhabitants (5,647 Indians). The Island of Cape Breton comprises 4,375 square miles of the territory of Nova Scotia, and 84,500 of its inhabitants.]

The strength of the principal religious sects is shown in the following table:

PROVINCES.	Baptists.	Roman Catholics.	Church of England.	Methodists.	Presbyterians.
Prince Edward Island.....	6,236	47,115	7,192	13,485	33,585
Nova Scotia.....	89,761	117,487	60,255	50,511	112,488
New Brunswick.....	81,092	109,091	46,769	54,519	42,883
Quebec.....	8,863	1,170,718	68,797	39,121	50,287
Ontario.....	106,680	320,839	366,539	551,508	417,749
Manitoba.....	9,499	12,246	14,297	7,470	14,292
British Columbia.....	494	10,043	7,804	3,516	4,095
Territories.....	20	4,443	3,166	461	531
Dominion.....	297,525	1,791,982	574,818	742,981	676,165

Of the Baptists, 50,055 were Free-Will, and 21,234 (in Ontario and Manitoba) Tunkers or Mennonites. Of the Methodists, 582,963 belonged to the Church of Canada, 103,272 were Episcopal, 27,236 Bible Christians, 25,680 Primitive, and 3,830 other Methodists. Of the Presbyterians, 629,280 belonged to the Church in Canada, 32,834 to the Church of Scotland, 12,945 were Reformed, and 1,106 other Presbyterians. There were 7,211 Adventists, 8,831 Brethren, 26,900 Congregationalists, 20,193 Disciples, 2,596 Reformed Episcopalians, 2,393 Jews, 46,350 Lutherans, 4,478 pagans, 6,519 Protestants, 6,553 Quakers, 2,126 Unitarians, 4,517 Universalists, 14,269 of other denominations, 2,634 of no religion; religion not given,

86,769. The increase of the population by immigration has fallen far short of the hopes of the Canadians thus far. The number of immigrants settling in the Dominion in 1881 was 47,991. The construction of 500 additional miles of railroad west of the Red River affords improved facilities to the farmers of the new Northwest. The distance of the prairie-lands of the Dominion from Liverpool is 600 miles less than that of the grain-districts of the United States. The Survey Department laid out into townships, sections, and quarter-sections, 9,000,000 acres in 1881, involving the measurement of 23,000 miles of lines of demarcation. The population by origin and place of birth is given in the following table:



PROVINCES.	ORIGIN.						PLACE OF BIRTH.			
	English.	French.	German.	Indian.	Irish.	Scott.	England.	Ireland.	Scotland.	United States.
Prince Edward Island.....	21,404	10,751	1,076	281	25,415	48,988	1,728	2,915	3,425	609
Nova Scotia.....	128,986	41,219	40,065	2,125	66,067	146,027	4,818	5,600	10,851	8,004
New Brunswick.....	98,387	56,635	6,810	1,401	101,284	49,829	4,174	16,355	4,168	5,108
Quebec.....	81,515	1,078,820	8,948	7,615	128,749	54,928	12,909	27,379	10,287	19,415
Ontario.....	535,835	102,748	188,394	15,325	627,262	878,586	189,081	180,094	82,178	45,454
Manitoba.....	11,508	9,949	8,652	6,767	10,178	16,506	3,457	1,886	2,868	1,752
British Columbia.....	7,297	916	858	25,661	8,172	8,892	8,294	1,285	1,204	2,295
Territories.....	1,874	2,896	21	49,472	281	1,217	98	62	186	116
Dominion .....	881,801	1,298,929	254,319	108,547	957,408	699,863	169,504	185,526	115,062	77,753

There were 21,394 persons of African origin, of whom 7,062 were in Nova Scotia, 1,688 in New Brunswick, and 12,097 in Ontario; 4,383 of Chinese origin, all but 33 in British Columbia; 30,412 of Dutch, 1,009 of Icelandic (773 in Manitoba), 1,849 of Italian, 667 of Jewish, 1,227 of Russian and Polish, 4,214 of Scandinavian, 1,172 of Spanish and Portuguese, 4,588 of Swiss, and 9,947 of Welsh origin; 2,780 of various origins; origin not given, 40,806. Of the inhabitants, 3,715,492 were born in the Dominion (101,047 in Prince Edward Island, 420,088 in Nova Scotia, 288,265 in New Brunswick, 1,327,809 in Quebec, 1,467,988 in Ontario, 19,590 in Manitoba, 32,275 in British Columbia, and 58,430 in the Territories), 4,596 in Newfoundland, 814 in the Channel Islands, 2,783 in other British possessions, 4,389 in France, 25,328 in Germany (23,270 being in Ontario), 777 in Italy, 8,376 in Russia and Poland (5,651 being in Manitoba), 215 in Spain and Portugal, 2,076 in Sweden, Norway, and Denmark, 7,455 in other countries, 380 at sea; place of birth not given, 6,334.

The cities and towns of over 5,000 inhabitants are shown below:

NAMES.	POPULATION.	
	1871.	1881.
Montreal, Quebec.....	107,225	140,747
Toronto, Ontario.....	56,092	86,415
Quebec, Quebec.....	59,699	62,446
Halifax, Nova Scotia.....	29,582	36,100
Hamilton, Ontario.....	26,716	35,961
Ottawa, Ontario.....	21,545	27,412
St. John, New Brunswick	28,805	26,127
London, Ontario.....	15,826	19,746
Portland, New Brunswick	12,820	15,226

**CRIME.**—The criminal statistics of Canada, officially reported for 1880, show that 40,874 persons were charged with, and 28,209 convicted of, criminal offenses. There were 6,622 charged with offenses against the person, and 4,507 convicted; 350 charged with offenses against property with violence, and 176 convicted; 4,563 charged with offenses against property without violence, and 2,380 convicted; 1,055 charged with malicious offenses against property, and 638 convicted; 125 charged with forgery, etc., and 41 convicted. Of specific offenses, 32 were accused, and 5 convicted, of murder; 18 accused, and 8 convicted, of manslaughter; 47 convicted of assault with murderous intent; 9 of rape, 18

of endangering the safety of railroad-passengers, 4 of concealing births, 5 of abortion, 4 of bigamy, 3,957 of assault and battery, 53 of burglary, 2,248 of larceny, 41 of counterfeiting, 8,438 of drunkenness. There were 5 executed, 2 sentenced to imprisonment for life, and 90 for five years and over. The occupations of the convicts were reported as follows: Agricultural, 998; commercial, 3,307; domestic, 1,563; industrial, 4,100; professional, 228; laborers, 7,218. There were 16,856 residents of towns against 3,059 from the rural districts; 7,683 married, 1,242 widowed, and 11,269 single; 10,286 reported as Roman Catholics, 2,496 as Church of England, 1,508 Presbyterians, 1,406 Methodists, and 507 Baptists.

**COMMERCE.**—The total volume of the foreign trade of Canada, in spite of the restrictive tariff, was larger in 1881-'82 than in any previous year. The exports amounted in round numbers to \$101,000,000, and the imports to \$119,500,000. The value of exports and of imports, with the duties collected upon them each year since confederation, is given below to indicate the fluctuations of Canadian commerce and the economical and fiscal effects of the new tariff which went into operation in 1879:

YEAR.	Exports.	Imports.	Duty.
1868.....	\$57,567,888	\$78,457,644	\$3,819,481
1869.....	60,474,781	70,415,165	8,298,909
1870.....	78,578,490	74,814,889	9,462,940
1871.....	74,178,618	96,092,971	11,848,655
1872.....	82,689,668	111,480,527	18,045,498
1873.....	89,789,922	128,011,281	18,017,780
1874.....	89,851,922	128,218,281	14,421,882
1875.....	77,886,979	128,070,288	15,861,382
1876.....	80,966,435	98,210,846	12,888,114
1877.....	76,875,898	98,827,962	12,548,451
1878.....	79,823,667	98,081,787	12,795,698
1879.....	71,491,255	81,964,427	12,939,540
1880.....	87,911,458	86,489,747	14,198,849
1881.....	98,290,828	105,890,840	15,500,755
1882.....	*101,000,000	119,500,000	22,000,000

Although the national policy has not succeeded in altering the adverse balance of trade which was deplored by its promoters, it has accomplished the object aimed at of reversing the relative positions of Great Britain and the United States in Canadian commerce. The United States, however, still enjoy a large trade with the Dominion, aggregating in 1881 \$73,000,000 according to the Canadian returns, and \$89,000,000 according to the American figures, which include Newfoundland. The

\* About.

imports from Great Britain amounted in the fiscal year 1882 to about \$43,500,000. The shipments of cattle and sheep showed a falling off. The numbers were 45,435 cattle and 62,401 sheep, exclusive of 7,955 of the former and 9,465 of the latter shipped from American ports.

A direct line of steamers was started in 1881, which make monthly trips to Brazil, the West Indies, and Spanish South American ports by the aid of a Government subsidy. This enterprise is connected with the "national policy" of the Government, which aims to supply the needs of the Dominion for tropical products by means of direct trade with the producing countries as well as to exclude American manufactures in favor of British, and British manufactures as far as protective duties will stimulate the development of Canadian industries. Attempts are being made to establish commercial relations with Australia, where there is already some trade, and with Cape Colony, India, China, etc.

Among the principal commercial events of the year was the fusion of the two great railroad corporations of the eastern provinces—the Grand Trunk and the Great Western. The products of the fisheries in 1881 amounted to \$15,817,162. The value of the canned salmon from British Columbia was alone over \$1,000,000. The copper and the iron ore, which is sent in large quantities to the United States, the phosphates, the asbestos, and the graphites of Canada are exported in increasing quantities. The lumbering industry labored under a depression in 1882 from a lessened demand. The protective duty of 50 cents a ton on anthracite and 60 cents on bituminous coal, which was imposed in 1879, has stimulated the coal-mining industry of Nova Scotia to some extent; but the failure of wood-fuel, which has risen in price as much as 50 per cent in two years in some localities, has much to do with the increased production, since the imports have increased at the same time. The output of the Nova Scotia mines since the imposition of the duty was as follows: 688,629 tons in 1879; 954,659 in 1880; 1,034,014 in 1881. In the first nine months of 1882 an increase of 18.3 per cent was shown over the corresponding period in 1881. The increasing exports from British Columbia, the greater part of which are shipped to the Pacific States, but small quantities also to the Sandwich Islands and Mexico, lower the adverse balance. The total exports from the Dominion in 1877-'78 were 340,127 tons; the imports, 406,090 tons of anthracite and 456,971 tons of bituminous, together 863,961 tons. The total exports of 1880-'81 were 420,955 tons; the imports, 572,092 tons of anthracite and 587,023 of bituminous, together 1,159,115 tons. In 1878 Nova Scotia exported more than British Columbia, but in 1880-'81 the exports from the Pacific colony were 214,243 tons, of which 207,806 went to the United States, against 190,551 tons from Nova Scotia.

**FINANCES.**—The public debt of the Dominion was incurred chiefly on account of public works—canals, railways, etc. About \$25,000,000 have been added to the debt since 1878. The debt stood in 1881 at \$199,861,537; of which total \$98,729,249 bore interest at 4 per cent, \$52,110,026 at 5 per cent, and \$17,839,064 at 6 per cent. The average interest on the debt payable in London was 4.40 per cent, against 5.55 per cent in 1867, when the total liabilities amounted to \$93,046,051. The interest charge constitutes nearly one-quarter of the whole expenses of the Dominion Government, amounting in 1879 to some 7 millions. The assets of the Government were counted at \$44,465,757, an increase of \$10,000,000 since 1878.

The receipts on account of the consolidated fund, or regular revenues, were larger in 1880-'81 than in any previous year, being \$29,635,297, the next largest having been \$24,648,715 in 1875. There was an increase of \$6,000,000 over the revenue of 1879-'80, the first manifestation of the working of the new tariff since the revival of business. The revenue for 1881-'82 gave still stronger evidence of the prosperity of the country and the demand for imported goods notwithstanding the high duties. The revenue for 1880-'81 yielded a surplus of \$4,132,743 over all expenditures; in 1881-'82 there was a further increase of \$3,000,000, the income exceeding \$32,000,000.

The expenditures on account of the consolidated fund, or ordinary expenditures of the Dominion Government in 1880-'81, amounted to \$25,502,554. Among the principal items were: Civil government, \$915,958; administration of justice, \$583,957; militia and defense, \$667,000; Public Works Department, \$1,138,765; Indian grants, \$805,097; immigration and quarantine, \$250,812; census, \$127,033; geological survey and observations, \$111,352; expenses of collecting customs, \$717,704; of excise, \$247,577; of public works, \$2,703,665; of the post-office, \$1,876,657.

The expenditures on account of the consolidated fund for the year ending June 30, 1882, amounted to \$26,419,670.

The expenditure on capital account, during 1880-'81, amounted to \$8,176,316, of which \$4,968,503 represents outlay on the Pacific Railway, \$608,732 on the Intercolonial Railway, \$1,242,943 on the Welland Canal, \$411,608 on the Ottawa canals, \$334,681 on Dominion lands, and the rest on the other canals, etc. The Government railways, embracing the Intercolonial and Prince Edward Island lines, have not yet been made to yield an income above the working expenses. Since 1868, when the Dominion Government assumed the administration of the Northwest Territories, there was expended upon them, down to 1880-'81, altogether, \$30,406,481. Of this, \$20,778,781, including \$17,524,100 expended upon the Canada Pacific Railway, were charged to capi-



tal account. The aggregate amount of revenue received from them from the beginning was \$593,293, not one fourth as much as the expenses of the mounted police alone.

The total revenue from all sources for the year 1881-'82 was reported as \$32,188,793, and the total expenditures on account of the consolidated fund, \$23,753,193.

The excess of the revenue from customs over the expected yield of the new tariff has caused the Government to modify various duties, by which a reduction in the receipts estimated to amount to \$1,500,000 will be attained. The reductions are in articles of food and in various manufacturing materials. The ill-advised corn duties, directed against the United States imports, have been altered, and the duties on tea, coffee, etc., lowered.

The estimated expenditures on account of the consolidated fund for the year ending June 30, 1883, amount, with the supplementary estimates, to \$28,102,628. The estimated expenditures on capital account are \$25,994,767. The acceleration of the Pacific Railway works increases the subsidies and other expenditures in connection with it to \$14,754,000 for the year. Of the remaining estimated expenditures \$2,829,000 are in the improvement of the canal system, and \$609,086 on the burdensome Intercolonial Railway.

LEGISLATION.—The session of the Dominion Parliament opened February 9th, and came to a close May 17th. No important measures were passed. The one which provoked the most discussion was the redistribution of seats in accordance with the new census. A civil-service act provides for the examination of candidates before entering the civil service, but does not make the examinations competitive. A few amending bills relating to jurisprudence were passed, including one providing for the extradition of fugitive offenders within the limits of the British Empire. A commission appointed to investigate the abuses of factory-labor had reported in favor of legislation similar to the English and American factory acts. A bill with very moderate provisions was framed by the Government, but afterward dropped. The establishment of a railroad commission was proposed by a private member, but not entertained. An act was passed making the practice of ticket-scalping a punishable offense. As many as twenty-three charters for railroad or bridge companies were granted or amended, and several subsidies voted.

A strong sympathy has been felt by the majority of the people of Canada for the Irish in their conflict with the British Government. The Canadian politicians were carried so far by this feeling, and by a desire to propitiate the large Irish vote, as to send an address to the Queen, recommending home rule as the solution of the Irish difficulty. The resolutions were introduced in the House of Commons by a private member, Costigan, who afterward re-

ceived a ministerial portfolio. Both the party leaders, Macdonald and Blake, expressed warm sympathy with the Irish, and the motion was carried in both Houses without a dissenting vote. The address set forth the facts that the Irish in Canada are prosperous and contented; it attributed the preference of Irish emigrants for the United States to their estrangement toward the British Government; it expressed the hope that the federal system with considerable powers of self-government, under which Canada has prospered, might be adopted between England and Ireland; finally, it petitioned for the release of the suspects. The indifference shown by the Canadians to the interests of British manufacturers, and to the representations of the British Government, when they adopted a protective tariff, had given deep offense to the English. The reply of Lord Kimberly, the Colonial Secretary, to the Irish resolutions of the Canadian Parliament was as sharp as it could be written, declaring that "her Majesty will, in accordance with the Constitution of the country, have regard to the advice of the Imperial Parliament and ministers, to whom all matters relating to the United Kingdom exclusively appertain."

ELECTION.—The Conservative Government, feeling secure in the popularity of the "national policy" at present, determined to procure a new lease of power before the expiration of the Parliament by lapse of time in 1883. After prorogation Parliament was dissolved and new elections ordered in June. The Liberal or Reform party were taken at a disadvantage by making the issue on the protective question. They had been free-traders hitherto, but were beginning to turn with the tide. The leader, Edward Blake, seeing the hopelessness of the free-trade views still advocated in the "Globe" newspaper, the organ of the party, preferred to enter the conflict without a party cry. He made use of the temporizing phrases familiar in American politics, of "incidental protection" and the "impossibility of free trade" in a country which must collect a revenue from customs, in order to retrieve his position. The boundary dispute was only available in Ontario, and could only harm the party elsewhere. The Pacific Railway arrangement was as permanently settled as the protective tariff, and added to rather than detracted from the strength of the Government party. The result was a Conservative victory. The new apportionment had increased the number of seats belonging to Ontario by 4, and of Manitoba by 1, leaving the other provinces with the same number as before. Seven of the leading Liberals lost their seats. The Conservative majority was not as large as in the last Parliament, in which they held 145 out of 206 seats. They were practically as strong, however, forming a compact party under the control of their skillful leader with a clear majority of 60 in the new House of 211 seats.

WELLAND CANAL.—The deepened Welland

Canal, with two feet more of water, or twelve feet throughout its length, was opened April 20th. The vessels which bring grain from the ports of the upper lakes and discharge it in the ports of Lake Ontario usually have a carrying capacity of 240 tons, but could not carry more than three quarters of a cargo when the draught of the canal was ten feet. The effect of the improvement on the commerce of the lakes was noticeable at once. The action of the State of New York in abolishing the tolls on the Erie Canal excited an agitation in Canada in favor of making the Dominion canals free, in order to compete with the American water-route.

**ONTARIO BOUNDARY.**—The boundary dispute between Ontario, Manitoba, and the Dominion Government continued the subject of excited controversy during the year. The disputed territory is about 97,000 square miles in extent. It is rich in timber, and contains mineral resources and some fertile tracts of land. The arbitrators to whom the question was referred in 1878, by the Dominion and Ontario Governments, awarded it to Ontario as possessing, under the British North America act, the same boundaries as the former province of Upper Canada, which had succeeded to the western boundaries of old Quebec. The western line was defined by the Treaty of 1763 with France as the extension of a line drawn along the course of the Mississippi River. The northern line was determined by the southern boundary of the Hudson Bay Company's Territory, which was defined to be the "height of land." The Ontario Legislature promptly ratified the decision. The Dominion Parliament not only omitted to do so, but made Manitoba a party to the dispute by an act passed in the closing days of the session of 1881, making the boundary of Manitoba coterminous with the western border-line of Ontario. The Dominion Parliament passed a resolution in April providing for the joint administration of the disputed territory by a commission appointed by the provincial Government of Ontario and the Federal Government, pending the adjudication of the matter by the Supreme Court or the Privy Council. At the close of the year, the question was still unsettled, the Ontario Government being unwilling to have the award of the commission of arbitration—Sir Edward Thornton, Sir Francis Hincks, and the late Chief-Justice Harrison—reviewed by another tribunal. This controversy between the Tory Government of the Dominion and the Liberal Government of Ontario was the leading political question of the year. By the act of 1881, about 35,000 square miles of the disputed territory would be joined to Manitoba, including all the valuable timber between Lake Superior and the Lake of the Woods, estimated at 26,000,000,000 feet.

**ONTARIO.**—The receipts of the Ontario Government for the year 1881 were \$2,746,772; of which \$1,116,872 was the subsidy from the

Dominion Government, \$80,000 specific grant, \$136,696 interest from special funds, \$992,504 revenue from the crown lands, \$98,782 revenue from public institutions, and the remainder from other internal sources. The expenditures under the supply bill footed up \$2,281,063, which, together with \$205,528 in aid of railways, and other permanent outlays, made a total expenditure of \$2,585,053. The chief items of current expenditure were: Education, \$502,824; maintenance of public institutions, \$551,668; administration of justice, \$251,119; legislation, \$178,954; civil government, \$174,803. The liabilities of the province amounted to only \$731,396; the public assets were valued at \$6,240,988. The budget estimates for 1882 made the receipts \$2,848,960; and the expenditures for current expenses \$2,100,169, on capital account \$247,220, together \$2,389,726. This province stands in the peculiar financial position of drawing sufficient revenues from the common property, with the fixed subsidy from the Dominion, to defray all the usual expenses of government and relieve the municipalities of the cost of maintaining asylums and prisons and of a large share of the cost of public education, without levying a single tax upon the people. The income is even sufficient to leave a large annual surplus to be added to the assets of the province. About \$500,000 was added in 1882 to the surplus, which amounted on December 31, 1881, to over \$2,000,000 in cash or its equivalent, and \$2,500,000 in other assets. The expenditures of 1882 showed a large increase over the preceding year, but the increase was entirely applied to the maintenance of public institutions, for which \$380,000 more than the appropriations of 1881 were voted, and in public education, which item increased \$51,000.

The right of the provinces to property escheating to the crown for want of heirs was formerly maintained by the courts of Ontario and Quebec. In a recent case the Dominion Government claimed the right to the reversion, and was upheld in its claim by the Supreme Court of Canada. The question was taken before the Privy Council by the Ontario Executive.

A Bureau of Industries for the collection of statistics, corresponding to the Agricultural Bureau at Washington, was established in the province of Ontario by an act of the Legislature.

The agricultural interests of Ontario are flourishing, notwithstanding the desertion of many of the old farms for the new wheat-fields of Manitoba and Dakota. Owing to this movement, the value of farm property has recently declined. The production of wheat in 1882, as reported by the new Bureau of Statistics, was 40,000,000 bushels, against 13,000,000 in 1870; of barley 22,250,000 bushels, against 9,461,000; of oats, 50,000,000 bushels, against 22,000,000. The acreage of land under cultivation was shown by the census to have increased 1,878,000 acres in ten years.



**THE NORTHWEST.**—The number of immigrants who settled in the Dominion in 1881 was 47,991, of whom about 28,600 went to Manitoba and the Northwest Territory. In the first nine months of 1882, 46,739 immigrants arrived, against 30,434 in the same period of 1881. There were 2,753 homesteads, comprising 438,707 acres, located in Manitoba and the Northwest Territories during 1881, a less number than in 1879. The number of acres pre-empted was 263,647. The settlements have been planted in all parts of the Northwest as far as the foot of the Rocky Mountains. The total number of homesteads located down to the end of 1881 was 14,124; the total number of acres occupied, 2,358,163.

Several colonization societies, some of them probably with speculative objects, have secured tracts in the Northwest under the provisions of a recent act releasing such bodies from the restrictions against purchases by non-residents. Within a year of the issue of the new regulations on May 25, 1881, some 7,000,000 acres were conveyed to various colonization companies, the price being the regular \$2 an acre, one fifth in cash and the rest in four annual installments, or, by a later arrangement, half the pre-emption price paid down in full.

One of the tracts was taken by a temperance colonization society, which will not allow the manufacture or use of intoxicating liquors within the limits of the settlement. As a counter-stroke, the licensed victualers started an association and purchased a neighboring tract. A company was formed, under the presidency of the Duke of Manchester, which acquired the title to a large portion of the Pacific Railway grant west of Brandon, with the object of promoting the colonization of distressed agriculturists from Ireland and Great Britain.

The efforts expended in instructing and encouraging the Indians of the Northwest in the raising of cattle and cultivation of the soil are gradually meeting with success. The Government felt impelled three or four years ago to supply the Indians with food in order to save them from impending famine, the consequence of the disappearance of the buffalo, which no longer crossed the border, and of the gradual extinction of small game. The supplies were continued the following year, and have now become a regular item of expenditure. Collisions are anticipated between whites and the red-men as the settlement of the Northwest progresses. To avert them it is proposed to raise the mounted police to double the existing force.

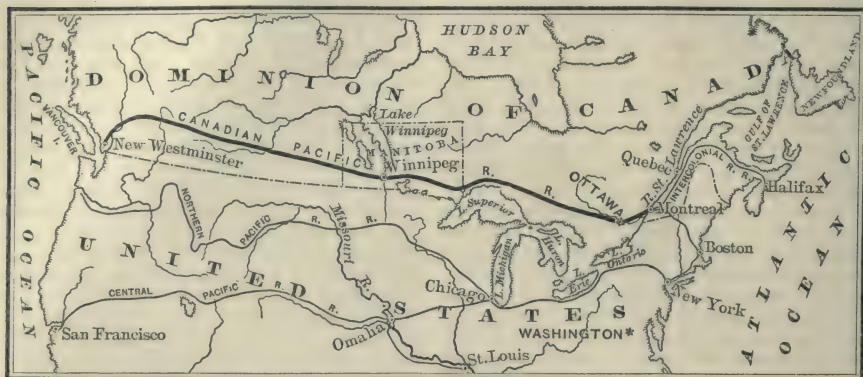
The Northwest Territory was divided by an order in Council into four separate districts or territories, named and bounded as follows: Assiniboia, containing about 95,000 square miles, bounded on the south by the frontier line of the United States, on the east by the western boundary of Manitoba, on the north by a line drawn near the 52d degree of latitude,

and on the west by one drawn between the 110th and 111th meridians; Saskatchewan, containing 114,000 square miles, bounded on the south by Assiniboia, on the east by Lake Winnipeg and Nelson River, on the north by a line near the 55th parallel, and on the west by a continuation of the western boundary-line of Assiniboia; Alberta, containing 100,000 square miles, bounded on the south by the American frontier, on the east by Assiniboia and Saskatchewan, on the west by British Columbia, and on the north by a continuation of the northern boundary-line of Saskatchewan; Athabasca, containing 122,000 square miles, bounded on the south by Alberta, on the west by British Columbia, on the east by the continuation of the eastern boundary of Saskatchewan deflected westward until it strikes the Athabasca River, and then by this river and the lake of the same name and the Great Slave Lake to the northern boundary, which is near the 60th degree of latitude. In Assiniboia are Q'Appelle, South Saskatchewan, and Souris Rivers, and Forts Pelly and Ellice. Saskatchewan includes Battleford, Carleton, and Prince Albert. Alberta is the cattle-ranch district, containing the Belly, Battle, and Bow Rivers. The famous Peace River district is in Athabasca.

**PACIFIC RAILWAY.**—The Canada Pacific Railway is being built at a more rapid rate than the specifications call for, and will probably be completed from ocean to ocean by the year 1886, or 1887 at the latest. The history of this enterprise has been recounted in former volumes of the "Annual Cyclopædia." It was in brief as follows: Upon the entrance of British Columbia into the Confederation, in 1871, a promise was given that the Canadian Pacific Railway should be built by the Dominion, and completed within ten years. A company undertook the work for a cash subsidy of \$30,000,000 and a land grant of 50,000,000 acres. The people were suspicious of the relations of the company to the ministers and party in power, and to managers of American railroads. At the general election Sir John A. Macdonald was voted out of office, and the first Canada Pacific Railway Company collapsed. The succeeding Prime Minister sought to obtain a new arrangement with British Columbia. The negotiations were prolonged two years, but finally came to nothing. In 1874 Mackenzie, who had professed the intention to redeem the pledge to British Columbia as nearly as possible, passed an act authorizing the construction of a transcontinental railway, either as a government work or by a private company. All efforts to induce capitalists to undertake the scheme were unavailing. The Government had expended a large amount of public money in the construction of portions of the line, when they were defeated at the polls in 1878. Sir John A. Macdonald, upon his return to office, after failing to induce English capitalists to embark in the enterprise, formed a syndicate,

composed of Americans, Canadians, and some English and Continental capitalists, to take the burden off the shoulders of the Government. The Government was thus relieved from the apprehension of an annual deficit of from \$1,000,000 to \$2,000,000 in operating the road

have established a coast telegraph, working a system of signals to convey the intelligence of the appearance of shoals of fish to the fishermen all along the coast. A similar plan has been operated with success in Norway. Large shoals of fish visit the shores of Newfound-



ROUTE OF THE CANADIAN PACIFIC RAILROAD.

after it was completed. The company agreed to finish the road by 1891, and keep it in operation forever. In return they received a cash subsidy of \$25,000,000, a land subsidy of 25,000,000 acres, and the 710 miles of railroad already constructed or contracted for by the Government, together with exemption from taxation and the monopoly of the traffic of Manitoba and the Northwest for twenty years. The Pacific Railway Company, which was formed in 1881, by the acquisition of the Canada Central Railroad, can reach Ottawa and Brockville, on the St. Lawrence, from their eastern terminus at Callender. They have a branch line between Pembina and Winnipeg, and are making connection with the Sault Ste. Marie. With its branches, the road will have a total length of some 4,000 miles. The section between Rat Portage and Winnipeg, 135 miles, was completed in 1881, and transferred by the Government to the company; the portion between Kamloops and Port Moody is also being built by the Government, and the eastern section, from Callender westward, as part of the bargain. The company are prosecuting the road through the fertile belt and its connections. It is expected that the year 1888 will see it completed to the foot of the Rocky Mountains. The route to be taken in crossing the mountains is not definitively settled. The Yellowhead Pass, to be approached from Edmonton, on the North Saskatchewan, was in favor until the Governor-General's visit to the Northwest; but an easier pass, situated above the sources of the Bow River, a tributary of the South Saskatchewan, from which the railroad would descend into the valley of the Columbia River on the western side, is now the expected route.

NEWFOUNDLAND. — The Newfoundlanders

land, but it is never known where or when they will appear. The fishermen can now sail at once to the spot, and utilize the opportunities which only came to them before by chance. The telegraph can also spread information about the movements of the ice, which is important not only to fishermen, but to the seal-fishers and the shipping industry. The fishermen of Newfoundland have lately fallen into a lamentable condition of bondage to the capitalists who have advanced them money. The men who speculate in their labor form the class which controls the legislation of the colony. They take the fish from the fishermen, and pay them in many districts entirely in kind.

DRAPER, HENRY, M. D., LL. D., son of Dr. John W. Draper, born in Prince Edward County, Virginia, March 7, 1837; died in New York, November 20, 1882. His death was sudden and unlooked for, being caused by an attack of pneumonia. He was in the prime of life, and his reputation was nearly, if not quite, equal to that of his father, whom he succeeded as professor in the New York City University. Henry Draper inherited an ardent liking for chemical studies and researches, and he stood, with his father, in the front ranks of that science. His early education was obtained in the public schools of New York city, from which he passed into the university, where he took the medical course, and graduated in 1858, at the age of twenty-one. The next year he traveled in Europe, directing his attention everywhere to scientific matters. An inspection of Lord Rosse's world-renowned telescope gave an impulse to his thought and effort in celestial photography, a branch of science which he afterward pursued with eminent success. On his return home he served, for



about a year and a half, on the medical staff of Bellevue Hospital. He was then elected to the chair of Physiology in the University of the City of New York, and six years later (1866) was placed in the chair of Physiology in the medical department of the same institution. As managing officer in that department he was active and energetic, and was also very successful in arousing interest in the institution after the severe loss of property it met with by fire. At this time he married a daughter of Courtland Palmer, of New York, who not only brought to him wealth and abundant means to carry forward to any extent his scientific pursuits, but also entered warmly into her husband's studies and purposes. His attention had been directed, when he was quite a youth, to the possibilities of microscopical photography, of which he made valuable use in medical science; he also incidentally discovered the use of protochloride of palladium in darkening collodion negatives. Soon after returning from Europe he constructed a fifteen-and-a-half-inch reflecting telescope, and, with the aid of this instrument, took a photograph of the moon, fifty inches in diameter. Professor Draper was the first to obtain a photograph of the fixed lines in the spectra of stars, an experiment which has been repeated only once or twice since. He was incessantly devoted to his work, and is said to have obtained photographs of more than one hundred of the spectra of different stars. In 1874 he was appointed, by Congress, to the commission created to observe the transit of Venus across the disk of the sun. As superintendent of the photographic department of the commission he was so successful in his work that a special gold medal was struck in his honor, by order of Congress, in the mint at Philadelphia. In 1877 he published a paper entitled "Discovery of Oxygen in the Sun, and a New Theory of the Solar Spectrum." The theory has been doubted and disputed, but it is reported that further studies in science tend to vindicate Draper's conclusions. At this date he visited the high ground between the Rocky Mountains and the Sierra Nevada, to test the question whether a great elevation was of special advantage for locating an observatory. As between lofty elevations inland or near the sea, he gave his judgment in favor of the latter as the most favorable site for an observatory. In 1878 he went to the Rocky Mountains again to photograph an eclipse of the sun, and for two years subsequent he labored to obtain photographs of the nebula of Orion. His observatory at Hastings-on-the-Hudson, and his laboratory at his residence in New York, were admirably equipped with everything which a scientist could desire, and he was one among the very few who could carry on any course of study or experiment without regard to cost or expenditure. Professor Draper died childless, and left no immediate descendant to carry forward his favorite studies.

DRAPER, JOHN WILLIAM, M. D., LL. D., born at St. Helen's, near Liverpool, England, May 5, 1811; died at Hastings-on-the-Hudson, January 4, 1882. His early education was at the Wesleyan School, Woodhouse Grove, where his scientific tastes were early developed. He pursued the study of physics, chemistry, and higher mathematics, under private instructors, and in 1829 went to the University of London, where he devoted himself to investigations into chemistry, specially, and the science of medicine in general. Most of his family having emigrated to the United States, John William followed, in 1833 entered the University of Pennsylvania, and graduated in medicine in 1836. His thesis on the crystallization of camphor under the influence of light, and kindred subjects, was regarded as of such superior merit that it was selected by the faculty for publication. This was the first of a long series of experimental researches on radiant energy. It led to his appointment to the chair of Chemistry and Physiology in Hampden Sidney College, Virginia, where he prosecuted these and other investigations in the same line. In 1839 he was invited to assume charge of his favorite department in the University of the City of New York, a position which he held during the remainder of his life. In 1841 he was active in establishing the University Medical College, of which he was presiding officer for nearly forty years. Dr. Draper's later years were spent at Hastings-on-the-Hudson, near the astronomical observatory of his son, Dr. Henry Draper. His wife died many years before him, leaving three sons and three daughters. His sons followed in their father's footsteps, and have maintained the family reputation.

Dr. Draper was a man of more than ordinary note in science; he was also a student and earnest thinker in the department of the philosophy of history and human progress. For more than forty years he was occupied in making experimental researches in physiology and molecular chemistry, and gave to the world the results of his work in the pages of "The New York Medical Journal," "The Journal of the Franklin Institute," "The American Journal of Science," and "The London Philosophical Magazine." These researches cover a very large range of subjects, but were chiefly devoted to a study of the chemical phenomena of light, in both the organic and inorganic world. In 1878 Dr. Draper collected and condensed these researches, and published them in a volume, entitled "Scientific Memoirs, being Experimental Contributions to a Knowledge of Radiant Energy" (8vo, pp. 473). This volume is pronounced by competent judges to be a noble monument to his memory, being the results of labors which have greatly advanced the sum of human knowledge. In it he claims to have been the first in America to give attention to the spectroscope and its importance in astronomical science. "The first photographic portrait from the life was made by me" (he says).

"I also obtained the first photograph of the moon. When Daguerre's process was published I gave it a critical examination, and described the analogies existing between the phenomena of the chemical radiations and those of heat." These and numerous other services which he rendered to science were freely acknowledged; and the American Academy of Arts and Sciences, at Boston, bestowed upon him the Rumford medals for the year 1875 (one of gold and one of silver) for his "Researches on Radiant Energy." A full list of Dr. Draper's other scientific memoirs and papers, corrected by himself, is given in an address delivered by him in 1874, entitled "Contributions to Chemistry" (pp. 78-82). A number of papers in science are in the hands of his sons, who, it is expected, will publish them in due time.

In addition to his profound researches in science, Dr. Draper gave attention to other, and, as he regarded them, kindred topics. His "History of the Intellectual Development of Europe" appeared in 1862, and has been translated into French, German, Italian, Polish, Russian, etc. Four lectures delivered by him, in 1865, before the New York Historical Society, were published under the title of "Thoughts on the Future Civil Policy of America." Between 1867 and 1870 he gave to the public his "History of the American Civil War" (three vols., 8vo); and in 1874, a volume entitled "History of the Conflict between Religion and Science" (12mo). Dr. Draper was also a frequent contributor to the pages of scientific journals and magazines.

**DWELLINGS, LABORERS'.** The question of sanitary dwellings for the poor has not awakened the interest of legislators in the United States beyond the requirements of proper plumbing, fire-escapes, etc. Even these laws are suffered to fall into disuse. Philanthropic individuals have built model tenement-houses in Brooklyn, New York, and other places. Yet, although the results were fairly satisfactory, the movement in this direction has ceased. The great Peabody buildings of London have yet no counterpart in American cities. These were erected in a district where the mortality was the greatest in the metropolis, double the usual rate. In them the death-rate is considerably below the average. For fifteen years the British Parliament has made the housing of the working-people of London a subject for legislative interference. In the same time private persons have devoted large amounts of capital to providing sanitary dwellings for the poor at low rents. The effect of the laborers' dwellings' acts of Parliament has apparently been to crowd the poorer population more closely together, and to increase their rents some 17 per cent on an average. Such were the untoward results temporarily of the first laws, under which a large number of buildings were condemned, but which contained no provisions for the shelter of the tenants who crowded into the remaining tenements. The rise in

rents is really due to the increased value of property for business and residences. This increase may be judged from the rise in the assessed valuation of the city of London, which has been 185 per cent in twenty years. The rents of rooms in the Limehouse and Whitechapel districts of the metropolis have risen in consequence of the development of business and population from two shillings to more than double, and whole families are sometimes crowded into little closets which are now let for two shillings or less a week. The landlords of these miserable tenements are usually small speculators, who have no sense of responsibility for the condition of the houses. The death-rate, which was under 20 per 1,000 in the rest of the metropolis, rose in these wretched courts to 40 per 1,000. The spread of zymotic diseases from these centers affected the whole population. To meet these evils the acts of 1875 and 1879 were introduced by the Conservative Government, the failure of which was the subject of a parliamentary investigation in 1881 and 1882. The Torrens acts of 1868 and 1869 enabled the vestries to close the worst houses in certain districts. Sir Richard Cross's acts gave power to the Metropolitan Board to buy up whole areas in unsanitary districts, with due compensation to owners, and imposed the duty upon it of providing accommodations for a number equal, at least, to the number of tenants disturbed. The local medical authorities indicated immediately over a score of areas which needed purification; but the vestries did not come forward with the proper co-operation. The Metropolitan Board proceeded to do the work in some of the condemned areas; but the majority of cases were referred back to the vestries, which not only let them drop, but from that time ceased to enforce the Torrens acts. The local boards were deterred, from a regard for the local popularity of their members. The consequences have been, that the offenders have escaped entirely the burden of the improvements, which have been shifted to the shoulders of the rate-payers, and that the improvements made under these conditions are of insignificant extent. The result of seven years' working of the Cross act has been that improved dwellings have been provided for only some 3,000 persons a year, about 3½ per cent of the annual increment of the population. There have been fourteen areas, covering forty-two acres, rebuilt under the act of 1875, domiciling about 20,000 people. The cost has been £1,500,000, of which 24 per cent only has been reimbursed by the sales of the cleared sites, leaving a net loss to the treasury of £1,200,000. For the whole of the expropriated land, except two or three acres sold for commercial purposes, only about one quarter of the cost was paid by buyers for the purpose of erecting houses for artisans under the conditions of the act. The small portion which they were enabled to dispose of for business sites, under the compulsory



clause requiring them to provide accommodations for at least as many of the working-classes as were displaced, brought five times the price per foot. The failure of the artisans' dwellings acts can be accounted for by the fact that in the greater part of London houses for the poor do not pay except by overcrowding, to-

gether with the liberal notions of compensation which prevail in England. The Corporation of London cleared two spaces at a cost of £240,000. They are offered for the ground only £1,250 a year for dwellings, but six times as much if shops may be built, and look to Parliament to save them from loss.

## E

## EARTH, AREA AND POPULATION OF THE.

During the last decade of years great attention has been given to attaining accurate estimates of the areas and populations of all the countries of the world, and their subdivisions. Drs. Behm and Wagner, in a new edition of their well-known collection of statistics, entitled "The Population of the Earth" ("Die Bevölkerung der Erde"), have availed themselves largely of planometric calculations for areas of many countries, and have used the new censuses which have been taken, within two years, in Greece, Denmark, United States, Finland, Germany, Switzerland, Belgium, Austria, Hungary, Bulgaria, Great Britain and dependencies, France, and Italy. The names of the countries are given in the order of the dates of the census. For most of these countries the complete results have been issued, and for the others the editors have been able to obtain the preliminary figures. Of course, estimates are sometimes little better than guesses; e. g., Africa, for which some authorities give 100,000,000 as its population, while Behm and Wagner hold on to the old figure of 200,000,000 with considerable hesitation. China, too, has been very variously estimated from 200,000,000 to 500,000,000. According to Behm and Wagner, in their latest issue, the number of the inhabitants of China does not exceed 379,500,000—a figure more likely to be near the truth, especially considering the large reductions in the population of certain districts in recent years from various causes not necessary to specify. And, further, as to estimated areas, it appears that General Strelbitsky, in a learned work on the "Superficies of Europe," makes out France to be 1,960 square miles larger than the official area, and Scandinavia 6,000; while from Italy he takes away 3,200 square miles. Messrs. Behm and Wagner have, however, examined all the data on these points with the greatest care and minuteness; they are supplied with all the material necessary to arrive at satisfactory conclusions; they have devoted many years to this particular study; and we believe that their results may be accepted with entire confidence. (See EUROPE, AREA OF.)

According to the latest data, the following are the areas and populations of the various continents, with the number of inhabitants per square mile:

CONTINENTS.	Square miles.	Population.	Number per square mile.
Europe.....	8,892,234	327,743,500	84.0
Asia.....	17,832,340	795,591,000	44.0
Africa.....	11,929,300	205,823,300	17.0
America.....	15,889,250	100,415,400	6.5
Australasia and Polynesia..	8,581,140	4,232,000	1.1
Polar regions.....	1,791,280	82,500	...
Total.....	54,415,544	1,483,887,600	26.8

The following are the areas and populations of the various countries of Europe, with the dates to which the figures refer:

COUNTRIES.	Area in square miles.	Population.	Date.
Germany.....	210,198	45,284,061	1880
Austria.....	112,000	22,144,244	1880
Hungary.....	129,051	13,695,184	1880
Holland.....	12,200	4,060,580	1880
Luxemburg.....	1,035	209,570	1880
Belgium.....	11,373	5,596,654	1879
Great Britain and Ireland	124,980	35,246,562	1881
Switzerland.....	16,560	2,846,102	1880
France.....	211,428	37,321,186	1881
Spain.....	201,237	16,625,560	1877
Portugal, including Azores and Madeira.....	85,131	4,550,699	1878
Italy.....	115,415	23,452,639	1881
Greece.....	92,575	1,979,428	1882
Roumania.....	51,973	5,376,000	1881
Servia.....	19,438	1,700,211	1880
Montenegro.....	8,612	236,000	1882
Turkey.....	62,175	4,490,000	1882
East Roumelia.....	14,861	815,573	1880
Bulgaria.....	25,531	1,998,938	1881
Bosnia, Herzegovina, Novi-Bazar.....	20,425	1,326,453	1879
Denmark.....	15,376	1,969,039	1880
Danish kingdom:			
Faroe Islands.....	593	11,220	1880
Iceland.....	40,914	72,438	1880
Greenland.....	80,000	10,000	1880
Danish Antilles.....	143	38,763	1880
Sweden.....	170,230	4,565,668	1880
Norway.....	180,170	1,918,500	1880
Russia.....	1,808,485	74,498,369	1879
Poland.....	60,924	7,104,760	1879
Finland.....	145,640	2,028,021	1879
Total.....	8,892,234	327,743,500	....

According to Behm and Wagner, the area of the territory which has been taken from Turkey and added to Greece is 5,340 square miles, and the population is 300,000. Considerable difference of opinion exists as to the boundaries between European Russia and Asia. If Strelbitsky's line be adopted, the area of Russia in Europe would be increased by 250,124 square miles, in addition to the number given above. The total area of Europe, according to Strelbitsky's calculations, is nearly 4,000,-

000 square miles. This includes the islands (with Iceland), 265,781 square miles, and the lakes, 87,880 square miles.

Coming to Asia, the usual difficulties are found in regard to Turkey. The latest available statistics as to population are those published in the "Salnamé" for 1879. Several changes in respect to Russia in Asia are to be noted, as also the large reduction made in estimating the population of China. The following table gives the results, as based on the labors of Behm and Wagner :

COUNTRIES.	Area in square miles.	Population.	Date.
Turkey .....	800,627	15,857,000	1879
Cyprus .....	3,707	180,916	1881
Russia in Asia:			
The Caucasus .....	190,060	5,500,554	1873-'80
Trans-Caspian .....	182,827	203,000	1873-'80
Siberia .....	4,995,043	8,800,200	1873-'80
Central Asia .....	1,807,104	5,000,000	1873-'80
Turkoman region .....	92,600	400,000	1873-'80
Khiva .....	24,120	700,000	1873
Bokhara .....	97,600	2,000,000	1873
Arabia (including Sinai and the Syrian Desert) .....	1,800,640	5,000,000	1880
Persia .....	668,828	7,600,000	1881
Afghanistan .....	388,660	3,500,000	1881
Kafiristan .....	22,674	400,000	1881
China (proper) .....	1,809,876	840,000,000	1881
Tributaries:			
Mantchooria .....	3,412,430	20,180,000	1881
Mongolia .....			
Thibet, etc. ....			
Corea .....	104,718	8,000,000	1881
Japan (and dependences) .....	162,978	95,357,212	1881
India (under British rule) .....	1,667,244	240,541,210	1881
Himalayan states .....	96,600	8,200,000	1877
French possessions .....	208	270,649	1879
Portuguese possessions .....	1,542	494,987	1877
Ceylon .....	25,702	2,600,980	1877
British Burmah .....	92,740	3,700,646	1877
Manikpoor .....	8,870	120,000	.....
East and south of Assam .....	28,000	150,000	.....
Burmah .....	192,200	3,500,000	.....
Siam .....	235,740	5,500,000	.....
Anam .....	178,200	20,000,000	.....
French Cochinchina .....	25,782	1,497,013	.....
Cambodia .....	88,844	800,000	.....
Independent Malacca .....	84,600	275,000	.....
Straits Settlements .....	1,496	300,000	.....
Andamans Island .....	3,600	10,500	.....
Sundas and Moluccas .....	697,502	26,867,000	.....
Nieobars .....	709	5,000	.....
Philippines .....	13,000	6,000,000	.....
Dutch possessions (including New Guinea and Papuan Islands) .....	685,000	26,962,000	.....
British North Borneo .....	24,800	140,000	.....
Australasia:			
New South Wales .....	350,000	651,468	1881
Victoria .....	100,000	62,346	1881
Queensland .....	778,600	200,525	.....
South Australia .....	1,014,000	200,865	.....
West Australia .....	1,078,000	81,000	.....
Tasmania .....	26,215	110,705	.....
New Zealand .....	206,200	889,938	.....
Oceanic Islands .....	.....	100,000	.....
Feejee .....	8,304	120,884	.....
Melanesia .....	58,842	517,400	.....
Polynesia .....	8,344	100,000	.....
Sandwich Islands .....	6,808	60,985	.....
Micronesia .....	1,412	61,600	.....
Total .....	21,418,480	799,823,000	.....

Africa presents several changes, and the estimates are proportionately uncertain, to say nothing of the fact that a very considerable portion of this quarter of the globe has never as yet been explored. The following table gives probable estimates, and approximates at least to reasonable certainty:

COUNTRIES.	Area in square miles.	Population.	Date.
Morocco .....	824,972	6,140,000	1877-'80
Tunis .....	46,500	2,100,000	1877-'80
Tripoli, etc. ....	418,340	1,010,000	1877-'80
Sahara .....	2,472,170	3,500,000	1877-'80
Egypt (proper) .....	874,110	6,588,774	1877-'80
Libyan oases and Soudan .....	820,650	12,816,226	1877-'80
Central Soudan .....	685,990	31,500,000	1877-'80
Senegambia .....	350,000	12,000,000	1877-'80
Sierra Leone .....	468	60,546	1881
Lagos .....	1,200	75,270	1881
Gold Coast .....	16,626	408,070	1881
Liberia .....	14,880	1,050,000	1881
Abyssinia .....	138,312	3,000,000	1877
Galla and Somali Lands .....	768,800	15,700,000	1877
North equatorial regions .....	910,980	37,000,000	1877
South equatorial regions .....	697,150	80,000,000	1877
Portuguese possess'ns, W. ....	823,760	9,000,000	1877
"  E. ....	896,460	1,000,000	1877
South African states .....	2,502,038	26,296,850	1877
Cape Colony .....	199,950	780,757	1880
Basutoland .....	9,720	128,176	1875
West Griqualand .....	17,491	45,277	1875
Transkei .....	15,573	400,944	1875
Natal .....	18,750	964,388	1880
Transvaal .....	114,145	816,960	1881
Orange Free States .....	52,975	138,518	1881
Islands, Atlantic .....	12,820	572,600	1881
"  Indian Ocean .....	244,056	4,330,000	1881
Total .....	11,929,300	205,823,200	....

In regard to America, the materials are only partly satisfactory. The accompanying table gives the result which is at present best attainable:

COUNTRIES.	Area in square miles.	Population.	Date.
Northwest Territory:			
Assiniboia .....	95,000	About 50,000	1881
Saskatchewan .....	114,000		
Alberta .....	100,000		
Athabasca .....	122,000	1,928,228	1881
Ontario .....	107,780		
Quebec .....	198,355		
New Brunswick .....	27,232	821,233	1881
Nova Scotia and Cape Breton .....	21,781	440,572	1881
Manitoba .....	150,000	65,954	1881
Prince Edward Island .....	2,173	108,891	1881
British Columbia .....	366,000	49,459	1881
British Territories .....	2,946,938	150,000	1881
Newfoundland .....	42,734	181,758	1881
French possessions .....	92	5,000	1879
United States .....	3,580,242	50,155,783	1881
Mexico .....	778,813	9,577,000	1880
Guatemala .....	40,777	1,315,210	1881
Honduras .....	47,192	350,000	1881
British Honduras .....	7,000	20,710	1881
San Salvador .....	7,380	300,000	1878
Nicaragua .....	58,120	350,000	1877
Costa Rica .....	20,704	185,000	1874
Panama .....	80,000	220,000	1870
West Indies .....	94,791	4,200,000	1879-'81
French Guiana .....	48,565	36,000	1879
Dutch Guiana .....	47,710	68,525	1879
British Guiana .....	88,497	248,110	1879
Venezuela .....	451,046	2,400,000	1881
Colombia .....	350,000	3,000,000	1881
Ecuador .....	250,000	1,100,000	1881
Peru .....	448,000	3,800,000	1876
Bolivia .....	518,920	2,000,000	1876
Chill .....	214,874	2,420,000	1881
Argentine Republic .....	1,164,387	2,540,000	1880
Uruguay .....	74,728	488,245	1880
Paraguay .....	95,316	298,290	1880
Brazil .....	3,494,887	11,108,291	1880
Total .....	15,889,250	100,415,400	....

These results are given with considerable confidence, although it must be confessed that there is no great certainty as to points of detail.



**EARTH-TREMORS.** Recent investigations have shown that the crust of the earth is in a constant state of vibration. Besides the violent shiverings called earthquakes, there are vibrations of the same nature, but of microscopic extent, which take place constantly over the whole surface. These microseismic tremors have hitherto escaped observation, although they are among the most universal of natural phenomena, because they can only be perceived by the aid of the most delicate instruments. There is another kind of movement affecting the earth's mass which is called oscillation. An increase in the barometric pressure will produce flexures in the surface of the earth which may be measured in inches, but which, like the earth-tremors, have been overlooked by scientific observers for the reason that the period of vibration is so long.

Earth-tremors are generally due to two causes: to the removal of barometric pressure, or to the passing of the tides. The release of the earth's mass from the superincumbent weight of air or water produces a quivering of the earth. The hugeness of the earth accounts for the fact that variations in the weight of air or water resting upon it are followed by elastic oscillations. Sir William Thomson explains the principle by the illustration of a mass of jelly, which the greater its size, the more it would be depressed by any weight resting upon it, and the more it would vibrate upon the removal of the load.

The first announcement of microseismic movements was made by Timoteo Bertelli, in 1870, who declared that he perceived in Florence the earthquakes which occurred in Romagna. Observations of minute earth-movements were instituted in Italy by Professor De Rossi in 1874. It was these observations which established the fact that microseismic storms follow the removal of barometric pressure. It was also noticed that these disturbances occurred sometimes simultaneously over the entire Italian Peninsula. The microseismic vibrations have also been studied in Japan. Local tremors of artificial origin, as when a railroad-train passes, have often interfered with delicate scientific observations in populous districts.

A committee, consisting of George H. Darwin, with his brother, Horace Darwin, Sir William Thomson, and others, was appointed by the British Association to determine the extent of the lunar disturbance of gravity. The work was conducted by the Darwins and Sir William Thomson at Cambridge. But it was found that the lunar changes in the plumb-line were rendered indistinguishable by the constant trembling of the earth. This was the first time that the vibrations from natural causes had been noticed in England. A mountain-mass depresses the yielding earth, and in plumb-line observations the deflection caused by the attraction of the mountain, and the apparent deflection due to the slope produced by the weight of the mountain, are superimposed, and the ap-

parent displacement of the plumb-line is exaggerated. The heaped-up air in an anti-cyclone would, in like manner, produce a depression of the earth's surface, and the attraction of the increased mass of air would cause a deviation of a plummet or pendulum. The effect of the ocean-tides is of the same order. The piling up of water against a shore at flood-tide causes the land to sink through a perceptible distance, and the retreat of the tide causes the land to rise, the slope of the flexures making the flood-tide higher and the ebb-tide lower. The elevation of the soil between the spring and neap tides varies as much as five inches. The deflections of the plumb-line due to these several causes are of the same order as that produced by the moon, and are sufficient to eclipse the lunar disturbance of gravity. As far as sixty miles from the coast the deflection due to tidal action is calculated to be as great as the maximum deflection of the plumb-line due to the direct action of the moon.

Earthquakes are the result of a complexity of causes, and are among the rare and irregular phenomena which can be studied with difficulty. The earth tremors and oscillations, on the other hand, are of continual recurrence, and depend upon natural laws which are known for the most part. It is a question whether the frequent disturbances of the earth's magnetism are not caused by microseismic storms, since it is known that earthquakes produce electric disturbances of great magnitude.

A series of observations upon earthquakes was instituted in Switzerland in November, 1879. From the first report, extending to the end of December, 1880, it appears that there were twenty-six earthquakes felt in Switzerland during the thirteen months. Many of these were of slight force, and consisted of a single shock. It was often possible to distinguish between one principal shock and a number of secondary ones, as if the strata which had been shaken violently had cracked and broken. The surface over which the earthquakes were felt extended from less than three and a third to over three hundred and fifty miles in diameter. Half of them affected only an area of less than twelve square miles, and three were felt over one thousand square miles. The great earthquakes at Chios, in 1881, lasted six days and consisted of thirty or forty shocks, any one of which was sufficient to destroy buildings. The soil seemed to dance up and down with the powerful vibrations. The earthquake in Casamicciola, by which one hundred and fifty lives were destroyed, was entirely local. This one was caused by the washing of the hot springs in the vicinity. The posts established by Professor De Rossi, of the Papal Academy, at Nuovi Lincei, recorded two hundred and forty-four perceptible earthquake-shocks in Italy in 1881. In the Italian stations the form of the motion, its intensity, direction, and speed, are studied. The vibrations from powerful earthquakes ex-

tend very far over the surface of the earth, and become longer as the distance from the center is greater. The great Lisbon earthquake of 1755 is known to have made the water in the pools and lakes of England wash from side to side as in a basin which is tilted. The unexplained rise and fall in the waters of the Swiss lakes, and in the great lakes of America and the Baltic, may be connected with seismological phenomena.

Earthquakes are now held to originate most frequently in the expansion of gases and vapor of water inside the crust of the earth. All the great volcanoes are situated near the sea, and emit during their eruptions immense volumes of steam. The effect noted by Perrey, of Dijon, that earthquakes occur with the greatest frequency at the perigee of the moon and its conjunction with the sun, which led him to suppose a tidal action of the conjectural fluid interior of the earth, can be explained by the pressure of the tide-water which causes more water to penetrate the interstices of the rock into the local caldrons, which produce earthquakes and volcanic eruptions. M. Daubrée announced to the French Academy of Sciences in June, 1882, that the water in the drainage-trenches of the English Channel Tunnel rose and fell with the tide. An increase of earthquakes has also been noted after rains and inundations. The influence of the tides is not, however, very strong, since Dr. Schmidt has collated the reports of three thousand earthquakes, and even found a maximum at the perion of the full moon, while De Rossi, Grablovitz, and Mercalli have noted similar anomalies.

**ECUADOR (REPÚBLICA DEL ECUADOR).** The territorial division of this country has recently been modified by the formation of a new province, Veintemilla (named after the present Dictator), corresponding to the old province of Carchi, and having for its capital Tulcan.

The Chief Magistrate of Ecuador is General Ignacio de Veintemilla, inaugurated as President in December, 1876—"Supreme Chief," in virtue of the *pronunciamiento* of April 2, 1882. The First Designado (or Vice-President) was Señor L. Salvador; and the Second Designado (or Second Vice-President), Señor F. Arias.

The Cabinet, at the end of the year, was composed of the following Ministers: Interior and Foreign Affairs, Señor F. Arias; Finance and Public Works, Señor de Icaza; War and Marine, Señor Echeverría.

The Governor of Guayaquil was General J. Sanchez Rubio.

The army in time of peace is usually about 1,200 strong.

In the absence of official returns it would be difficult to ascertain the precise condition of the national finances at the present time; but it may be stated that the revenue seldom exceeds \$2,500,000, while the expenditure rarely falls short of \$3,500,000.

The usual sources of income have grown much more productive than in former years; but the maximum aggregate revenue hitherto registered for any one year has been 3,594,000 pesos.

According to the report of the proceedings at a meeting of the bondholders called (in London) in 1881, for the purpose of obtaining sanction to a resolution proposing the basis of an arrangement which it was hoped might be effected with the Government of the Republic, the principal of the foreign debt of Ecuador, as agreed upon in 1854, was £1,824,000, bearing interest at one per cent, with the possibility of a rise should the yield of the Guayaquil custom-house exceed \$400,000 per annum. No increase of rate had ever been obtained, notwithstanding the marked improvement in the customs receipts at the port just mentioned; indeed, payment of the stipulated rate had only been made for about twelve years, when it was totally suspended. The arrears of interest amounted, at the time of the meeting, to £264,480, and the aggregate indebtedness, consequently, to £2,088,000, which it was then proposed to convert into £950,000 of new five per cent bonds. The home debt was stated to amount to 7,250,000 pesos at the beginning of 1877. Interesting details relating to the foreign debt were given in the volumes of the "Annual Cyclopædia" for 1874, 1875, and 1881.

The foreign trade of the republic is chiefly carried on through the port of Guayaquil. The staples of export are cacao, Peruvian bark, India-rubber, hides, ivory-nuts, coffee, and gold-dust. Foremost in importance among these commodities is cacao, the quantity annually shipped being of the average value of 6,000,000 pesos. The shipments of cacao for 1882 were but 18,904,693 pounds, against 22,308,235 pounds for 1881, and 31,546,657 pounds for 1879. Next in order is Peruvian bark, the trade in which has been rapidly increasing for some few years; ivory-nuts rank immediately after the bark, and these are followed by India-rubber. The exports of the last three articles are of the mean annual value of 450,000 400,000, and 350,000 pesos respectively. The coffee-shippments are less uniform in importance: those for 1878 were of the value of 182,385 pesos, while those for 1879 did not reach one half of that amount.

The exports to the United States were as follow in 1882: hides, 1,233,890 pounds; India-rubber, 933,111 pounds; cacao, 1,323,091 pounds; Peruvian bark, 139,745 pounds; ivory-nuts, 159,897 pounds; coffee, 10,000 pounds; sarsaparilla, 4,558 pounds; the aggregate value of the shipments, including 1,817 pesos in specie, having been 1,288,043 pesos, against but \$1,049,220 for 1879. The imports from the United States for the year last mentioned were of the value of \$1,148,350.

From the figures of the following table it will be seen that the trade between Great Britain



and Ecuador is not only more considerable than that between the United States and that republic, but steadily growing in importance:

YEAR.	Exports to Great Britain.	Imports from Great Britain.
1876.....	\$1,292,595	\$1,126,865
1877.....	928,955	1,259,375
1878.....	1,498,920	1,000,555
1879.....	2,615,860	1,409,925
1880.....	3,286,655	1,761,565

No more recent report of the shipping movements at the port of Guayaquil has been published than that given for 1879 in the "Annual Cyclopædia" for 1881.

There are at present seventy-seven miles of railway completed in the republic.

For many years past little tranquillity has been enjoyed within the borders of this, perhaps, the most distracted of all the Spanish-American republics, not excepting Venezuela; and the people, though rarely exposed to the horrors of civil war, have been so harassed by the misrule and abuses of reckless despots as to be impeded from continued and energetic application to their pursuits, to the very great detriment of the industries and commerce of the country. The Dictator García Moreno, assassinated in 1875, was succeeded by a constitutional President, Dr. Antonio Borrero, who inaugurated a new order of things, but from whose hands the power was wrested before the lapse of a year by the disloyalty of one of his trusted officials. General Ignacio Veintemilla, to whom Borrero had confided the important military command of Guayaquil in an hour of threatening peril for the Government, used the troops committed to his charge to depose his chief and cause himself to be proclaimed President of the Republic. Veintemilla's term of office, under the articles of the present (eighth) Constitution, should have expired in August, 1882; but, not satisfied with six years of power, he voluntarily provoked a revolution which might enable him more surely to accomplish his design to cause himself once more to be declared "Supreme Chief," or Dictator, as he had already done in 1878.\* It had been arranged beforehand that the *pronunciamiento* should be simultaneous in Guayaquil, Quito, and the other principal towns of the republic. The Dictator, in the decrees relating to this mock revolt, styled himself "Supreme Chief by the unanimous vote of the people"; but events soon transpired which revealed the real nature of that vaunted unanimity. The fictitious *pronunciamiento* was immediately followed by a genuine one in every part of the country, the expressed determination of a people, irritated beyond further endurance, to rid themselves of the terrorism of Señor Veintemilla. How unanimous this resolution was has been demonstrated by the fact that, in the course of a few months, the

Dictator was forced to take refuge in his last stronghold—Guayaquil. The first province to rise in arms was that of Esmeraldas, north of Guayaquil, which took place in April; but, unfortunately for the cause, the leader of the movement was a person at once incompetent and presumptuous. The main body of the Government troops, having taken up their position in Esmeraldas, had intrenched the town, and seemed determined to remain there for the purpose of sustaining the Dictator's supremacy in the north. The revolutionists, comprehending that possession of the place was indispensable to the success of their efforts, attacked it in August, and were repulsed, the intrepidity of the besiegers, for the most part Colombians, having been, it is said, more than counterbalanced by the incapacity of their leader, Alfaro. A second and successful attack was made in January, 1883, under General Salazar, whose services had been arrogantly refused some months previous by Alfaro. The Government forces, before abandoning their positions, sacked the stores and dwellings, and set fire to the town in three places. They then took refuge on board a steamer, the Huacho, and were conveyed to Guayaquil. In the mean time the revolutionary movement had become general in the interior; the Government garrison, seven hundred strong, in Quito was attacked by a republican (revolutionary) body of volunteers, numbering one thousand, under Colonel Sarasti, a lawyer and impromptu soldier. The latter, General Salazar, and Colonels Landázuri and Reynaldo Flores, are named as the officers who have taken the most active and distinguished part in the struggle, and as those to whose efforts was mainly due the desperate, almost hopeless, situation in which the Dictator found himself in the last week of January.

EDUCATION AND ILLITERACY. The subject of public education has been acquiring new interest and importance of late, not only in the United States, but in European countries. The statistics of the decennial census of 1880 show the extent of illiteracy in the Union, and the Bureau of Education furnishes figures exhibiting the provision made for popular education in the several States. Of the entire population of 50,155,783 in the United States, 36,761,607 are returned as ten years old and upward. Of these persons 4,923,451, or 13·4 per cent, were unable to read, and 6,239,958, or 17 per cent, were unable to write. Of the total population ten years old and upward, 82,160,400 were white, and 4,601,207 colored. The number of the former unable to write was 3,019,080, or 9·4 per cent of the whole, while of the latter 3,220,878, or 70 per cent, are unable to write. Of the whites 25,785,789 were natives of the country, and 6,374,611 were foreign-born. Of the former 2,255,460, or 8·7 per cent, could not write, and of the latter 763,620, or 12 per cent. The percentage of illiteracy, taking inability to write

\* See the "Annual Cyclopædia" for 1878, p. 260.

as the test, varied greatly in the different States, and was perceptibly affected by the proportions of colored and of foreign-born population. The highest percentage of all was in the Territory of New Mexico, where it was 65; but the next, 55.4, was in South Carolina, which has the largest proportion of colored inhabitants. Other percentages above 25 were: Alabama, 50; Georgia, 49.9; Mississippi, 49.5; Louisiana, 49.1; North Carolina, 48.3; Florida, 43.4; Virginia, 40.6; Tennessee, 38.7; Arkansas, 38; Kentucky, 29.9, and Texas, 29.7. These are all States with a large colored and comparatively small foreign population, but the ratio of illiteracy among the native whites is high in most of them: 25 per cent in Alabama, 25.5 in Arkansas, 20.7 in Florida, 23.2 in Georgia, 22.8 in Kentucky, 19.8 in Louisiana, 16.6 in Mississippi, 31.7 in North Carolina, 22.4 in South Carolina, 27.8 in Tennessee, 13.9 in Texas, and 18.5 in Virginia. The percentage of colored illiterates in these same States is as follows: Alabama, 80.6; Arkansas, 75; Florida, 70.7; Georgia, 81.6; Kentucky, 70.4; Louisiana, 79.1; Mississippi, 75.2; North Carolina, 77.4; South Carolina, 78.5; Tennessee, 71.7; Texas, 75.4; Virginia, 73.7. On the other hand, the rate among persons of foreign birth in those States was comparatively low: 7.7 per cent in Alabama, 5.6 in Arkansas, 10 in Florida, 5.6 in Georgia, 9.7 in Kentucky, 10.9 in Louisiana, 6 in Mississippi, 3.3 in North Carolina, 4.9 in South Carolina, 7.5 in Tennessee, 24.7 in Texas, and 5.4 in Vir-

ginia. The lowest percentage of illiteracy in any of the States, measured by inability to write, was found in Wyoming Territory, 3.4 per cent; the next in Nebraska, 3.6; and the next in Iowa, 3.9. Other States and Territories follow in this order: Maine, 4.3; Dakota, 4.8; New Hampshire, 5; Michigan, 5.2; Montana, 5.3; New York, 5.5; Ohio, 5.5; Kansas, 5.6; Connecticut, 5.7; Oregon, 5.7; Wisconsin, 5.8; Vermont, 6; Minnesota, 6.2; New Jersey, 6.2; Illinois, 6.4; Massachusetts, 6.5; Colorado, 6.6; Washington Territory, 7; Idaho, 7.1; Pennsylvania, 7.1; Indiana, 7.5; California, 7.8; Nevada, 8; Utah, 9.1. These are all in which the rate is below 10 per cent. The lowest rate for native whites is 0.7 per cent in Massachusetts, and the highest, outside of New Mexico, 31.7, in North Carolina. The lowest rate for foreign-born whites was 3.3, in North Carolina, and the highest, 27.3, in Rhode Island. In Massachusetts it was 19.6; in New York, 12.5; in Pennsylvania, 15.1. The rate of illiteracy among the colored population in the North was much lower than in the South, and, as a rule, lower than that among foreign-born whites. In Massachusetts it was 15.1; in New York, 21.2; in Connecticut, 17.4; in Rhode Island, 23.6; in Pennsylvania, 27.1. The following table shows the number of persons ten years old and upward, in each State and Territory, and the number returned in 1880 as unable to read and unable to write, together with a comparison of the figures for white and colored persons unable to write:

STATES AND TERRITORIES.	Persons of ten years of age and upward.			White persons of ten years of age and upward.		Colored persons of ten years of age and upward.	
	Enumerated.	Returned as unable to read.	Returned as unable to write.	Enumerated.	Returned as unable to write.	Enumerated.	Returned as unable to write.
	Number.	Number.	Number.	Number.	Number.	Number.	Number.
Alabama.....	851,730	870,279	433,447	452,722	111,767	899,058	321,630
Arizona.....	32,922	5,496	5,342	28,634	4,824	4,288	1,018
Arkansas.....	531,876	153,229	202,015	398,905	98,542	137,971	103,478
California.....	681,062	48,588	53,480	589,235	26,090	91,827	27,840
Colorado.....	158,220	9,321	10,474	155,450	9,900	2,764	508
Connecticut.....	497,303	20,986	28,424	487,780	26,768	9,523	1,661
Dakota.....	99,549	3,094	4,821	98,348	4,157	1,501	664
Delaware.....	110,850	16,912	19,414	91,611	8,346	19,245	11,068
District of Columbia.....	136,907	21,541	25,778	91,372	8,988	45,085	21,790
Florida.....	184,650	70,219	80,133	99,137	19,768	85,518	60,420
Georgia.....	1,043,540	446,083	520,416	563,977	128,934	479,868	391,482
Idaho.....	25,005	1,384	1,775	21,451	784	3,524	904
Illinois.....	2,269,315	96,890	145,397	2,234,473	132,426	84,887	12,971
Indiana.....	1,468,095	70,008	110,761	1,438,955	120,393	29,140	10,363
Iowa.....	1,181,641	23,117	46,009	1,174,063	44,337	7,578	2,272
Kansas.....	704,297	25,503	39,476	673,121	24,888	31,176	14,588
Kentucky.....	1,163,498	258,186	343,392	973,275	214,497	190,223	138,895
Louisiana.....	649,070	297,312	318,880	320,917	58,951	325,153	259,429
Maine.....	519,669	18,181	22,170	518,011	21,758	1,658	412
Maryland.....	695,364	111,887	134,488	544,086	44,316	151,278	90,172
Massachusetts.....	1,432,183	75,635	92,980	1,416,767	90,658	15,416	2,892
Michigan.....	1,236,686	47,112	63,723	1,219,906	58,932	16,750	4,791
Minnesota.....	559,977	20,551	34,546	557,183	38,506	2,794	1,040
Mississippi.....	733,693	315,612	373,201	328,296	53,448	425,397	319,758
Missouri.....	1,557,631	188,513	203,754	1,453,293	152,510	104,893	56,244
Montana.....	81,939	1,580	1,707	28,968	631	3,003	1,076
Nebraska.....	813,271	7,580	11,528	816,312	10,925	1,959	602
Nevada.....	50,666	3,703	4,069	42,595	1,915	8,071	2,184
New Hampshire.....	286,133	11,932	14,302	285,504	14,203	594	94
New Jersey.....	865,591	39,136	53,249	835,385	44,049	80,206	9,200
New Mexico.....	87,966	52,994	57,156	70,767	49,597	8,199	7,559
New York.....	3,981,428	166,625	219,600	3,927,603	208,175	53,825	11,425
North Carolina.....	959,951	367,890	463,975	608,806	192,082	351,145	271,943
Ohio.....	2,899,307	86,754	131,547	2,889,523	115,491	59,889	16,350
Oregon.....	180,565	5,370	7,423	119,482	4,343	11,088	3,050



STATES AND TERRITORIES.	Persons of ten years of age and upward.			White persons of ten years of age and upward.		Colored persons of ten years of age and upward.	
	Enumerated.	Returned as unable to read.	Returned as unable to write.	Enumerated.	Returned as unable to write.	Enumerated.	Returned as unable to write.
Pennsylvania.....	3,203,215	146,188	228,014	3,186,561	209,981	66,654	18,083
Rhode Island.....	220,461	17,456	24,793	215,193	23,544	5,308	1,249
South Carolina.....	667,456	821,780	869,848	272,706	59,777	894,750	810,071
Tennessee.....	1,062,180	294,385	410,732	790,744	210,227	271,386	194,495
Texas.....	1,064,196	256,223	816,432	808,981	128,912	255,265	192,520
Utah.....	97,194	4,851	8,826	95,876	8,187	1,818	689
Vermont.....	264,052	12,998	15,887	268,245	15,681	807	156
Virginia.....	1,059,084	860,495	430,352	630,584	114,692	428,450	815,600
Washington.....	55,720	8,191	8,889	49,269	1,429	6,451	2,460
West Virginia.....	428,587	52,041	85,876	410,141	75,287	18,446	10,189
Wisconsin.....	965,712	88,693	55,558	961,438	54,233	4,279	1,825
Wyoming.....	16,479	427	556	15,240	374	1,239	182
The United States.....	86,761,607	4,923,451	6,280,958	82,160,400	3,019,050	4,601,207	8,220,878

Statistics relating to the provision made for proper education in the several States are presented with fullness and from the latest sources in the various articles on the States in this volume, but for the sake of comparison some general figures are here drawn from the latest re-

ports of the National Bureau of Education. The following table shows the total population, the school population, enrollment, average attendance, total number of teachers, and length of school year, in days, in the several States and Territories:

STATES AND TERRITORIES.	Total population.	School population.	Enrollment.	Average attendance.	Total number of teachers.	Length of school year (in days).
Alabama.....	1,262,505	388,003	179,490	117,978	4,615	80
Arkansas.....	802,525	247,547	70,792	.....	1,827	.....
California.....	864,694	215,973	158,765	100,966	3,595	146-6
Colorado.....	194,327	85,566	22,119	12,613	678	89
Connecticut.....	622,700	140,235	119,694	78,421	3,100	179-02
Delaware.....	146,608	85,459	27,823	.....	594	153
Florida.....	269,498	88,677	39,315	27,046	1,095	.....
Georgia.....	1,542,180	438,444	298,538	145,190	6,000	.....
Illinois.....	3,077,871	1,010,851	704,041	431,638	22,255	150
Indiana.....	1,978,301	708,558	511,283	321,659	13,578	136
Iowa.....	1,624,615	586,556	426,057	259,836	21,598	143
Kansas.....	996,096	340,647	231,434	137,667	7,730	107
Kentucky.....	1,648,690	545,161	265,581	193,874	6,764	102
Louisiana.....	989,946	273,845	98,440	45,626	2,025	118
Maine.....	648,986	214,656	149,827	103,113	6,984	120
Maryland.....	954,948	330,590	162,481	55,778	8,125	176
Massachusetts.....	1,733,055	307,821	306,777	233,127	8,595	177
Michigan.....	1,686,937	508,221	362,556	213,898	13,949	141
Minnesota.....	780,773	271,428	180,243	117,161	5,215	94
Mississippi.....	1,181,597	426,689	236,704	156,761	5,569	77-5
Missouri.....	2,168,380	728,434	476,376	219,132	10,447	100
Nebraska.....	452,402	142,348	92,549	60,156	4,100	109
Nevada.....	62,266	10,592	9,045	5,401	197	142-8
New Hampshire.....	346,991	71,132	64,341	48,966	3,460	105-8
New Jersey.....	1,181,116	380,685	204,961	115,194	8,477	192
New York.....	5,082,871	1,641,173	1,081,598	578,089	80,730	179
North Carolina.....	1,399,750	459,324	225,606	147,802	4,130	54
Ohio.....	3,198,062	1,043,320	747,138	476,279	23,684	150
Oregon.....	174,768	59,615	37,583	27,435	1,314	89-6
Pennsylvania.....	4,282,891	1,370,000	987,310	601,627	21,875	147
Rhode Island.....	276,581	52,273	44,730	29,065	1,235	184
South Carolina.....	995,577	228,128	184,072	.....	8,171	77
Tennessee.....	1,542,359	544,862	300,141	191,461	5,954	63
Texas.....	1,561,749	230,627	136,736	.....	4,861	73
Vermont.....	392,286	92,381	75,238	43,606	4,926	125
Virginia.....	1,522,565	555,807	320,736	128,404	4,873	113
West Virginia.....	618,457	210,113	142,850	91,704	4,134	99
Wisconsin.....	1,315,497	488,229	299,258	197,510	10,115	162-5
Total.....	49,371,340	15,351,875	9,680,403	5,744,188	.....	.....
Arizona.....	40,440	7,148	4,212	2,347	101	109
Dakota.....	135,177	12,080	8,042	3,170	256	88
District of Columbia.....	177,624	43,558	26,439	20,637	438	193
Idaho.....	32,610	.....	6,758	.....	160	.....
Montana.....	39,159	7,070	3,970	2,506	161	96
New Mexico.....	119,565	29,312	5,151	.....	147	132
Utah.....	143,963	40,672	24,326	17,178	517	128
Washington.....	75,116	24,228	14,032	9,555	560	87-5
Wyoming.....	20,759	.....	2,090	1,287	49	.....

The following shows the amount raised by taxation for the support of public schools in each State and Territory during the year 1880:

STATES AND TERRITORIES.	Amount received from taxation.		
	From State tax.	From local tax.	Total.
Alabama.....	\$180,000	\$120,000	\$300,000
Arkansas.....	111,605	77,475	189,080
California.....	1,818,209	1,898,572	2,711,781
Colorado.....	.....	386,383	386,383
Connecticut.....	210,953	1,066,814	1,276,667
Delaware.....	.....	151,045	151,045
Florida.....	(\$104,530)	.....	104,530
Georgia.....	945,790	125,289	471,029
Illinois.....	1,000,000	5,735,473	6,735,473
Indiana.....	1,456,584	2,168,302	3,625,186
Iowa.....	.....	4,227,300	4,227,300
Kansas.....	.....	1,276,786	1,276,786
Kentucky.....	588,354	382,083	971,392
Louisiana.....	356,000	94,000	450,000
Maine.....	224,565	596,295	820,860
Maryland.....	491,406	721,571	1,212,977
Massachusetts.....	.....	4,872,286	4,872,286
Michigan.....	370,758	2,074,079	2,458,581
Minnesota.....	257,689	1,073,537	1,331,526
Mississippi.....	.....	384,769	384,769
Missouri.....	.....	2,163,380	2,163,380
Nebraska.....	78,503	713,155	786,968
Nevada.....	.....	.....	.....
New Hampshire.....	.....	.....	544,716
New Jersey.....	1,017,785	724,413	1,742,198
New York.....	2,750,000	6,925,992	9,675,992
North Carolina.....	.....	(\$814,719)	814,719
Ohio.....	1,558,307	5,155,579	6,714,086
Oregon.....	183,477	79,562	213,089
Pennsylvania.....	.....	7,046,116	7,046,116
Rhode Island.....	80,800	414,532	495,652
South Carolina.....	.....	.....	440,110
Tennessee.....	.....	.....	698,776
Texas.....	678,603	.....	678,603
Vermont.....	113,173	804,313	417,491
Virginia.....	596,516	665,459	1,261,975
West Virginia.....	212,753	490,432	703,185
Wisconsin.....	25,000	2,198,581	2,223,581
Arizona.....	.....	.....	67,028
Dakota.....	.....	123,643	123,643
Dist. of Columbia.....	.....	474,556	474,556
Idaho.....	.....	48,017	48,017
Indian Territory.....	.....	.....	.....
Montana.....	64,643	5,256	69,899
New Mexico.....	.....	.....	.....
Utah.....	63,041	43,337	106,378
Washington.....	102,201	3,816	105,520
Wyoming.....	.....	7,056	7,056
Total.....	(\$419,249) \$14,287,570 \$53,913,956		\$70,371,435

Most of the States have also permanent school funds, some of which exceed \$10,000,000 in amount, and yield more than half a million of income.

**NATIONAL AID PROPOSED.**—An effort has been made in Congress, thus far without success, to secure the adoption of a policy of national aid for public education in the several States to be distributed according to their needs as indicated by the statistics of illiteracy. The principal plan proposed contemplates an annual appropriation from the public Treasury for a series of years, and diminishing in amount from year to year, to be expended under the direction of the Secretary of the Interior, through a Commissioner of Education to be appointed for each State. The plan is opposed, on the ground that provision for popular education is very properly in the exclusive control of the States, and should be kept there. The theory which has thus far prevailed is,

that the people directly concerned and benefited should not only have complete direction of their educational interests, but should pay for the benefits enjoyed by themselves. The plan of national aid has not apparently met with public favor.

**IMPROVED METHODS OF INSTRUCTION.**—There has been a good deal of discussion in the United States in regard to improved methods of instruction and administration in public schools. The tendency in many of the States to develop special features of public instruction is meeting with opposition. It is generally contended that the efforts and resources of the public should be directed to imparting the rudiments of education in the most effective and complete manner, and that until this is done there should be no diversion of these resources and efforts to the higher or the special instruction of some. Objection is made to the higher branches in common schools, and to institutions of higher education maintained at public expense, so long as there is a considerable mass of population, especially in large cities, to which the benefits of elementary education are not brought. As to methods of instruction, the old way of following text-books closely, and learning much by rote, is discredited, and the idea is generally advocated of more teaching by objects and examples and actual application of principles. This is sometimes known as the Quincy method, inasmuch as it has been carried further in the schools of Quincy, Mass., under the effect of certain local influences, than elsewhere. As an illustration of the method of instruction and the principle adopted, it may be stated that when studying geography, for instance, the children are given no text-book on the subject during the first three years. In order to learn what is a hill, bay, cape, ocean, or other geographical formation, they are required to observe closely the natural scenery of the locality where they live, and to report what they have seen. By means of some moistened clay and a slab prepared for the purpose, the configurations in question are modeled by the classes. The memory is not crowded with definitions of political divisions, as a monarchy or an empire, and these subjects come up with greater interest, it is believed, when the child is advanced to the study of history. In the same way the purpose throughout is that of teaching things and ideas rather than mere words and names.

**EDUCATION IN FRANCE.**—As to the state of public education in European countries, the statistics are somewhat meager. Great advance has been made in France since the establishment of the republic. In 1872, when the population was 36,102,921, there were 18,324,801, or 36.9 per cent of the whole, who were unable to read or write. This, however, included 3,540,101 children under six years of age. Only 19,005,517, or 52.6 per cent of the population, could both read and write. Attendance at school was optional, and the Govern-



ment neglected to provide sufficient accommodation for the school population. Many of the poorer communes did little or nothing for popular education, and it was left largely to the religious congregations. Government aid to primary education in 1860 amounted to 5,424,035 francs; in 1870, under the empire, it was 9,817,513 francs; in 1877 it had risen to 22,035,760, and in 1882 the government assistance to the communes, to enable them to fulfill the requirements of the new primary education law, amounted to about 50,000,000 francs. In addition to this the departments spent about 25,000,000 francs, and the communes 60,000,000, for primary education alone. The statistics of illiteracy have been reduced to a very notable extent, and promise practically to disappear under the effect of the compulsory education act.

**IN BELGIUM AND OTHER COUNTRIES.**—State aid to education in Belgium has risen from 6,425,000 francs in 1870 to 20,400,000 in 1882. While attendance is still optional, every effort is made to place the rudiments of education within the reach of all. In Italy, also, a great advance has been made. The number of public elementary schools increased from 32,732 in 1870 to 41,108 in 1879, and the government grant for their support has risen from \$3,000,000 in 1873 to \$6,200,000 in 1882. The law makes attendance obligatory, and energetic efforts have been made of late to provide for its full enforcement. In addition to the action of the Government, local and private efforts have been greatly stimulated. In Prussia and some other German countries there are many endowed schools, but the government expenditure in that kingdom for the year 1882 was \$11,458,856, chiefly for the establishment of new institutions. Austria adopted a compulsory school law in 1868, at which time the bulk of the agricultural population of the country was illiterate. The government expenditure in aid of local effort to provide primary education under the law increased from \$2,300,000 in 1870 to \$6,500,000 in 1881. Russia, with a population of 78,500,000, of which 15,000,000 are of school age, has only 28,357 elementary schools, attended by 1,213,325 children. Of the government grant of \$9,000,000 to schools of all grades, less than half a million is devoted to elementary education.

**EDUCATION IN GREAT BRITAIN.**—Prior to the passage of the Elementary Education Act in 1870, Great Britain was accustomed to make parliamentary grants in aid of elementary schools. These amounted in 1868 to £680,425 for England and Wales. In 1882 they had risen to £2,749,863. The number of schools increased from 10,751 in 1872 to 17,614 in 1880, and the number of pupils from 2,397,745 to 4,240,753 in the same period. In Scotland the number of schools increased from 1,962 in 1872 to 3,056 in 1880, and the number of children in attendance from 206,090 to 404,618.

The parliamentary grants for Scottish schools for 1882-'83 amounted to £468,512. The number of elementary schools in Ireland is 7,522, pupils 1,031,995, parliamentary aid £729,868. The public schools established in England under the act of 1870 are known as "board-schools," to distinguish them from the great endowed institutions which have long been known as "public schools," and from the "national" schools, which are attached to the Established Church.

**BOARD-SCHOOLS.**—The board-schools are not absolutely free, but small weekly fees, varying from two to ten cents per week, are paid by the pupils. The bulk of their support comes from local taxes or rates, but there is a government grant amounting to \$3.50 to \$4 a year for each pupil. Attendance upon the board-schools where they have been established is compulsory, unless the parent elects to send his child to some other, and the denominational schools are, for distinction's sake, known as voluntary. It is said that though the accommodations and instruction in the board-schools are generally superior to those in the voluntary schools, the latter are, as a rule, preferred by people of means and social pretensions. The voluntary schools are allowed to share in the government aid, on condition that they do not carry religious instruction beyond a certain limit; that they follow the government schedule of study and submit to government inspection, and do not make their own charges exceed eighteen cents per week for each pupil. The total cost of board-school education in England and Wales, including London, is \$20.40 per year for each pupil, and in London alone it is \$28. This includes an allowance for invested capital. Leaving out the original cost of buildings, it is \$14.58 per year for each pupil in the whole country, and about \$20 in London. Each school-building contains three separate schools or departments: one for infants of both sexes, one for boys, and one for girls, each with a head teacher. Children are admitted to the infant department at three years of age, and few remain in the school after fourteen. The course of instruction above the infant department is divided into seven grades prescribed by the Government, each occupying a year. The schools open with religious exercises, but the pupils are not required to be present at these. The salaries of head-masters of boys' departments are \$1,000 to \$1,200 per year; those of mistresses of girls' departments, about \$600; of male assistants, \$550; of female assistants, \$400. Members of the school boards are elected for a term of three years, and receive no compensation. The London School Board consists of 53 members, divided among ten districts, the largest having eight and the smallest four. The London Board is contemplating the establishment of schools for "higher elementary education."

A new education code has been adopted for

England and Wales, to go into effect at the beginning of 1883, which simplifies to some extent the administration of the board-schools, but is taken up chiefly with the grades of instruction and requirements for examinations. Elaborate instructions were sent out from the Education Department to "her Majesty's Inspectors." These are taken up with minute directions about the details of studies, the methods of instruction, and the scope of examinations, the general purpose being to secure thoroughness in elementary studies and a close application to the business of the school. On the result of the inspection depends the amount of the grant to be received from year to year by particular schools. The circular deprecates all resort to corporal punishment, and directs that it shall never be administered by another than the head teacher, and that every instance be recorded in the "log-book."

**INDUSTRIAL SCHOOLS.**—Attention has been directed strongly of late to industrial and technical education. The City and Guilds of London Institute has established a college for this special object at Finsbury, and has begun the establishment of the central institution. The Technical College at South Kensington is constantly extending its usefulness, and the establishment of a technical school in each considerable town, and of industrial classes in the elementary schools, is advocated in England. A Royal Commission was appointed in 1881, and visited France and Italy for the purpose of studying the means of improving the taste and skill of artisans. One of the subjects on which they reported were the apprenticeship schools of France in which trades are taught. There is a very successful establishment of this kind in Paris, in which 250 pupils are taught at an annual cost of \$15,000. Three other municipal schools of the kind for boys and one for girls are contemplated in Paris and one at Boulogne. One already exists at Havre, and the system seems likely to extend rapidly. The Clock-makers' Guild of Paris has an apprenticeship school of its own, and there is a watch-making school at Cluses. The Government maintains similar institutions, one at Sèvres for porcelain-decoration, and another at the Gobelins factory. It is generally admitted that the superiority of French workmanship is due to the attention given to technical education and training, and a perceptible improvement in the quality of manufactures of various classes is said to have resulted already from what has been done in that direction in England.

**FRENCH SCHOOL LAW.**—An important event in the educational field in Europe is the adoption of the new law in France regarding primary instruction, which took effect on the 28th of March. Its chief purpose was at once to secularize elementary education and to make it compulsory. The first article of the act defines the scope of primary instruction, which is characterized in general as moral and civic. It comprises reading and writing; the language

and elements of the literature of France; geography, particularly that of France; history, particularly that of France down to our own times; some familiar ideas of law and political economy; the elements of natural science, physics, and mathematics; their application to agriculture, hygiene, the industrial arts, manual labors, and the use of tools; elements of design, modeling, and music; gymnastics; military exercise for boys and needle-work for girls. Article second declares that the public primary schools shall have one vacant day each week, besides Sunday, "in order that parents may give to their children, if they desire, religious instruction outside of the school-rooms. It is declared that religious instruction in private schools is a matter of option. Sections of the law of 1850 are abrogated which gave to ministers of various denominations a right of inspection, supervision, and direction in public and private primary schools. Article four makes primary instruction obligatory for all children from six to thirteen years of age, either in public or private schools or in families. A school commission is instituted in each commune, to have charge of the schools and look after the attendance of children. This commission is composed of the mayor, who shall be its president, one delegate from each canton, and, in communes comprising several cantons, as many delegates as there are cantons, designated by the inspector of the academy, and members designated by the municipal council in number not exceeding one third of the council itself. At Paris and Lyons there is a commission for each *arrondissement*, presided over by the mayor at Paris, and at Lyons by one of the adjuncts. It is composed of one cantonal delegate designated by the inspector of the academy, and members designated by the municipal council to the number of three to seven for each *arrondissement*. The term of office of the commissioners appointed by the municipal councils expires at the election of new councils. The primary inspector is a member *ex-officio* of the school commission. Provision is made for a certificate of primary study to be granted after public examination to children of eleven years or more, and those obtaining certificates are thereafter free from the compulsory requirements of the law. The parent or guardian of any child is required to give notice to the mayor of the commune, fifteen days before the time of entering the classes, of his intention of having the child taught at home, or sending it to a public or private school. Every year the mayor in conjunction with the school commission must prepare a list of all children from six to thirteen years of age, and notify the persons having charge of them, of the time of entering classes. In case no declaration is made by the parent or guardian, the child is entered in the public school, and notice is given to the person responsible for the child. Lists of the children enrolled are furnished to the directors of pub-



lie and private schools eight days before the opening of the terms. When a child leaves school, notice must be given to the mayor, with an indication of the provision to be made for its future instruction. In case of temporary absence, explanation of the cause must be given to the teacher, who is required to keep a register of attendance and make a monthly report of absences, with the causes, to the mayor and the primary inspector. Excuses for absence have to be submitted to the commission, and only sickness, death in the family, and accidental interruption of communication are to be regarded as legitimate. Other exceptional circumstances may be accepted at the discretion of the commission. This requirement applies to directors of private as well as public schools, and any disregard of it is reported to the departmental council, which has the power to impose penalties, including suspension for three months. If a child is absent as much as half a day four times in a single month, without an excuse satisfactory to the commission, the parent or guardian may be summoned, and, in default of satisfactory explanation or amends, may be subject to the penalty of having his name and offense publicly posted. Repetition of the offense may be brought to the attention of a justice of the peace, and dealt with under the penal code. The commission is allowed to grant leaves of absence in certain cases, not exceeding three months in the year, and subject to the approval of the inspector if exceeding fifteen days at one time. Attendance in part may also be dispensed with on the approval of the departmental council, in the case of children employed in industries or entered as apprentices. Children who receive instruction at home must submit to a public examination each year upon subjects corresponding to those taught to children of their age in the public schools. The jury of examination consists of the primary inspector or his delegate, a delegate of the canton, and one person qualified by a diploma of the university or a certificate of capacity. The judges are chosen by the inspector of the academy. In the examination of girls, the person holding a certificate of capacity must be a woman. If the examination of any child is unsatisfactory, the parent or guardian is required to send it to a public or private school, notifying the mayor of his choice. The school fund instituted by the law of 1867 is established in each commune.

**Grounds of Opposition.**—Opposition to this law, both when it was pending in the Chambers and after its adoption, was based on the features which make instruction wholly secular, and which make it obligatory. It was argued by the Clergy and by Catholics generally that moral instruction must necessarily be religious. An amendment proposed by M. Jules Simon, in the Senate, that teachers should instruct their pupils in their duty toward God and their country, was the subject of protracted debate on this point. The provision in regard to re-

ligious instruction outside of the school was regarded as far more rigid than that of the Belgian law of 1879. This allows religious instruction by ministers of the different forms of worship in the school-houses themselves before or after school-hours. The French law simply allows one day in the week which may be devoted to religious teaching outside of the school, at the option of parents. In other words, religious instruction is excluded from the schools, and relegated to the home or the Church. M. Waddington attempted without avail to secure an amendment which would allow ministers of religion to use the school-houses for instruction, on Sunday and other days, when there were no school sessions. The principle adhered to was that of a strictly secular use of the funds and appliances of primary education.

The compulsory clause of the law of March 28, 1882, is also specially objectionable to Catholics in France. According to a statement of M. Chesnelong, in 28,000 communes of France, having less than 2,000 inhabitants each, there are none of what are called "free schools" at all, and can be none on account of the general poverty of the people. Compulsory education, therefore, means compulsory attendance upon public schools of the state.

**LAW IN BELGIUM.**—In Belgium, on the contrary, education is not made obligatory, and nearly everywhere there are the free private schools in close proximity with those of the state. The parent generally has his choice between the two. In Belgium provision is made that instructors in the public schools shall be prepared in the normal schools of the state. In France there is no similar provision. In point of fact the teachers come very largely from the various religious "congregations." The law of January 22, 1881, in regard to primary normal schools, does not forbid religious instruction, but makes special provision for it. But when these teachers assume their functions in the primary schools, they are practically debarred from any inculcation of religious ideas, and this is a cause of complaint on the part of Catholics, especially as in the poorer communes they have no choice but the public schools, and are obliged to send their children to some school. In Belgium the school committees are appointed by the Minister of Public Instruction, and no regard is paid to the wishes of the communal authorities, and priests are not invited to serve. In France the commissions are constituted mainly by the communal councils, and priests are often selected. This has given special significance to the attitude of the Church toward the schools. It has been the policy of the ecclesiastical authorities to encourage the entrance of priests into the school commissions in those localities where there is a lack of the "free schools." In many cases special instructors have been engaged to look after the religious culture of children outside of the schools, in strict ac-

cordance with the law. In a circular, dated April 25th, Cardinal Donnet, the venerable Archbishop of Bordeaux, said the masters would do nothing contrary to the new law by meeting the scholars in the morning, before the hour for opening the school, for prayer and study of the catechism in a private room outside the school proper; and, where that was impracticable, he authorized the use of the church for the purpose. In Belgium the ecclesiastical authorities have held an attitude of discouragement to the secular public schools, even withholding the sacraments from those taking part in their management and instruction, or resorting to them for education. The different action shown by the Church in France is due to the obligatory features of the law, from which there is no escape without conflict with the state, and the lack of school facilities other than those provided by the state in most of the poorer and more sparsely peopled communes.

QUESTION IN SWITZERLAND.—An interesting and important question has been brought up in Switzerland by an effort to transfer the charge of public education from the local authorities to the Federal Government. By the elections of October, 1881, a considerable radical majority was returned to the Federal Assembly, and on June 14, 1882, the following decree was adopted by the two Houses, the National Council and the Council of the States: The Federal Council is charged to proceed immediately, through the Department of the Interior, to such investigation and study in regard to the situation of the schools in the cantons, as is necessary to assure the complete execution of Article XXVII of the Federal Constitution, and to authorize legislation on the subject. To place the department in a satisfactory position for this task, it is allowed a special secretary (Secretary of Public Instruction), with an annual compensation limited to 6,000 francs. His functions shall be determined by a special regulation of the Federal Council. This proposition occasioned a good deal of discussion, and met with warm opposition. As one result of school management in the cantons through the local authorities, the sentiment of the people in regard to religious instruction had been very generally satisfied. The provisions of Article XXVII of the Federal Constitution are the following: "The cantons provide for primary education, which shall be sufficient, and placed exclusively under the direction of the civil authority. It is obligatory, and in public schools gratuitous. The public schools may be attended by adherents of all confessions, without suffering in any way in their liberty of conscience or belief. The Confederation will take the necessary measures against the cantons which do not fulfill these obligations." This was claimed as a guarantee of religious freedom in the management of schools, and, as in most of the cantons there was a large preponderance of Catholics, the schools under local manage-

ment partook largely of a religious character. This fact has been regarded as the motive for the attempt to transfer the control to Federal authority under a Secretary of Public Instruction in the Department of the Interior. The decree for an investigation, etc., was justified by its advocates under the last clause of the article quoted above, on the ground that the cantons failed to fulfill their obligation to place the direction of primary instruction under the civil authority exclusively. It was, in fact, or at least was claimed to be, largely in the hands of the Church. The proposition of the Federal Council met with strong opposition, and it was urged that the public education was made by the Constitution a local affair of the cantons, and the Federal authority had no right or power to intervene, to deprive them of its control. The actual programme of the administration was indicated in a document issued by Councilor Schenk, of the Interior Department. His views were presented under six heads: 1. Interdiction of public schools based on religious confession. 2. Interdiction of public instruction by the religious communities. 3. A prohibition of confiding the inspection of schools to ecclesiastics. 4. A project for placing private schools under the regulation of the state. 5. Giving the state full authority in the control of education, but not clearly defining the line between Federal and cantonal authority as representing the state. 6. Establishing religious instruction, rather historical than dogmatic, at the option of the cantons, but apart from the regular hours and exercises of the schools. This programme excited the strenuous opposition of the Church, and of those jealous of a centralization of the powers of state in the Federal Council.

Under the Swiss Constitution a law proposed by the Federal Assembly must be submitted to a vote of the people provided 30,000 citizens, or eight cantons, make the demand. This process is known as the *Referendum*, and more than 200,000 signatures were affixed to the demand for a vote on the decree of June 14th. This number was unparalleled in the annals of the Constitution. Several of the cantonal governments also joined in the demand, and a warm canvass was conducted on this question. The vote was taken on the 26th of November, and resulted in the rejection of the decree of the Assembly by 307,352 to 167,221.

EGYPT, a principality, tributary to the Sublime Porte, which attained a semi-independence under Mehemet Ali, appointed Turkish Governor in 1806, who made himself master of the country by force of arms. His grandson Ismail, who succeeded as Vali, or Viceroy, in 1863, obtained further concessions from the Porte, including the right to bear the title of Khidiv-el-Misr, Persian-Arabic for King of Egypt, and the adoption of the Salic law of succession. Ismail involved the country in financial embarrassments in his desire to introduce European civilization and develop





*Engraved by J. H. Wallis, from a portrait by J. H. Wallis.*

*Lord Gen. Sir Garnet Joseph Whitely, G.C.B., G.C.M.G.  
Commander of the British Army in Egypt.*





its material resources. After the default of interest upon the bonds, France and England interposed in 1876, and procured the deposition of Ismail in 1879, after a mutiny in the army occasioned by his efforts to satisfy the European bondholders. He was succeeded by his son Tefvik, August 8, 1879. Mohamed Tefvik, born in 1852, is the sixth ruler of the dynasty of Mehemet Ali. A French and an English Controller-General were given joint supervision of the expenditures according to a decree of the Khedive issued November 10, 1879. An International Commission of Liquidation was appointed under a decree issued April 5, 1880. The Controllers gradually assumed direction of the entire administration, a condition of affairs which led to a movement for popular self-government in 1881, and, upon the refusal of the Khedive and the English and French Governments to sanction the scheme, to a rebellion in 1882, which was suppressed with British troops. The Egyptian war was the most momentous event of international interest which occurred in 1882. The financial complications which led to the interference of the Western powers, and the chain of circumstances which resulted in the revolt against the Controllers and the Khedive, with the diplomatic discussions anterior to the armed intervention of England, and the history of the campaign, are described in the following pages.

**AREA AND POPULATION.**—The total area of the Egyptian dominions, including the regions on the upper Nile and in Central Africa which were subjugated in 1874 and 1875, is estimated at 1,406,250 square miles, with a total population of 16,400,000. The area of Egypt proper is about 210,000 square miles, and the population, as officially estimated in 1878, is given as 5,517,627, divided between the inhabitants of the town districts or governments (Mohafzas) and the rural districts or provinces (Moudiries) and between the sexes as follows:

DIVISIONS.	Males.	Females.	Total population.
Lower Egypt.....	1,335,258	1,493,737	2,829,995
Middle Egypt.....	322,672	330,447	653,119
Upper Egypt.....	788,598	732,500	1,471,398
Towns.....	278,711	290,404	569,115
Total.....	2,725,239	2,792,388	5,517,627

The area of the annexed and conquered districts is estimated at 1,026,250 square miles, and the population at about 10,800,000, including Kordofan with 278,740 inhabitants, Darfour with some 4,000,000, and Nubia, the Soodan, and the Equatorial Provinces, with an aggregate population estimated at 6,500,000. The principal towns and their population in 1877 are: Cairo, 327,462; Alexandria, 165,752; Damietta, 32,730; Rosetta, 16,243; Suez, 11,327; Souakin, 4,600; Port Said, 13,294 (in 1881); Massawah, 2,744; El-Arich, 2,506; Ismailia, 1,897; Tanta, 60,000; Zagazig, 40,000; Syout, 27,470; Damanhour, 25,000; and Mansura, 16,170.

The foreign population of Egypt, not included in the above, was returned in 1881 as 68,560, divided between the following nationalities: Greeks, 29,960; Italians, 14,520; French, 14,010; English, 4,095; Austrians, 2,480; Spaniards, 1,000; Germans, 1,880; Persians, 752; Russians, 358; Americans, 140; Belgians, 140; Dutch, 120; Danes, 70; and Portuguese, 35—registered in the consular books.

**COMMERCE.**—The foreign trade of Egypt is very great, but consists largely of goods carried in transit. The values of the exports to and imports from the different countries in 1881 were as follow:

COUNTRY.	Imports.	Exports.
Great Britain.....	\$17,996,000	\$40,967,000
France.....	5,668,000	5,745,000
Austria-Hungary.....	2,574,000	2,338,000
Italy.....	1,450,000	3,647,000
Turkey.....	765,000	2,014,000
Russia.....	915,000	5,390,000
United States.....	723,000	245,000
Greece.....	88,000	502,000
Other countries.....	4,832,000	737,000
Total.....	\$34,514,000	\$64,588,000

Raw cotton is the largest article of export. In recent years the cotton-seed has been shipped in large quantities to England. The grain exports, including beans, are next in importance. These vary greatly from year to year. The shipments of raw cotton to Great Britain in 1880 aggregated 152,606,608 pounds; the average quantity for ten years was 169,000,000 pounds. The decrease is made up by the exports to other countries, 257,000 bales going to Great Britain and 179,000 elsewhere in 1881. Four fifths of the wheat exported and two thirds of the beans went to England in 1881. The exports of the principal classes of merchandise in 1881, compared with the preceding year, were in value as follow:

EXPORTS.	1880.	1881.
Textile materials.....	\$37,499,000	\$44,475,000
Cotton-seed.....	7,688,000	7,495,000
Cereals.....	11,415,000	7,082,000
Sugar.....	8,760,000	1,586,000
Gums, fats, and oils.....	1,019,000	1,305,000
Skins.....	500,000	655,000
Ostrich-feathers.....	487,000	325,000
All other exports.....	2,808,000	1,709,000
Total exports.....	\$64,616,000	\$64,588,000

The following were the values of the principal imports:

IMPORTS.	1880.	1881.
Textiles and clothing.....	\$14,568,000	\$13,436,000
Coal.....	2,913,000	4,331,000
Metals and metal manufactures.....	1,280,000	1,228,000
Drugs, colors, etc.....	1,654,000	1,502,000
Gums, fats, and oils.....	1,351,000	1,505,000
Fermented liquors.....	815,000	1,022,000
Machinery.....	608,000	1,115,000
All other imports.....	9,397,000	10,285,000
Total imports.....	\$32,586,000	\$34,514,000

The exports remained nearly stationary, while the imports increased from \$25,000,000

in 1879 to the above totals in the two succeeding years. There were about \$60,000,000 of specie imported and only \$12,500,000 exported in the three years.

The commerce of Alexandria and Port Said is carried on entirely with steam-vessels. Port Said has become the largest coal emporium in the Mediterranean, importing over half a million tons in 1881. British steamers of the aggregate tonnage of 305,000 sailed to English ports, and of 308,000 tons to Continental ports, while the ships of other nations trading with the Continent aggregated 521,000 tons. Odessa, Trieste, Dunkirk, and Genoa are getting increasing shares of the Egyptian trade.

**AGRICULTURE.**—The crop in Egypt depends upon the Nile. One foot difference in the rise of the Nile is estimated to be worth £2,000,000. The rise begins in June, and the fall in September. In the last hundred years there have been forty-five years of good floods, varying from twenty-four to twenty-seven feet; fifteen years of extraordinary floods; and a bad Nile, rising only from ten to twenty feet, for forty years. Irrigation is a great help. The *zowats* and jobbers who water the fields of the fellahen for £3 an acre have four hundred and seventy-six steam-pumps in operation, besides the 107,200 Persian water-wheels, which employ 60,000 animals and 150,000 men for six months of the year. American windmills could be used with the greatest advantage if it were not for the Arab prejudice against windmills. There are, according to the surveys, 1,100,000 acres of desert land which could still be easily reclaimed. The crop in Egypt has been estimated at £53,000,000, or £10 per acre, in good years. Mulhall's estimate for average years, of twenty-four feet rise, is only about £8 per acre, as follows:

CROP.	Acreage.	Yield.	Value.
Maize .....	1,884,000	55,000,000 bushels.	£8,500,000
Wheat .....	1,150,000	33,000,000 "	8,300,000
Beans .....	1,220,000	23,000,000 "	4,300,000
Barley .....	521,000	16,000,000 "	2,500,000
Cotton .....	872,000	290,000,000 pounds.	9,900,000
		10,000,000 bush. seed	1,800,000
Rice .....	50,000	4,000,000 fds sticks	400,000
Lentils .....	150,000	2,000,000 bushels.	800,000
Sugar .....	80,000	3,000,000 "	700,000
Flax .....	24,000	70,000 tons.	1,700,000
Clover, etc.,	390,000	6,000 "	400,000
Total .....	6,341,000	.....	£44,800,000

The above estimates include the rum, flax-seed, dates, and all other agricultural products. The excess of acreage is explained by the fact that a part of the land produces double crops.

**FINANCE.**—Ismaïl Pasha upon his accession in 1863 found the Egyptian debt about \$16,000,000, or \$3 per head of the population. When he was deposed in 1879 it had risen to \$500,000,000, or nearly \$90 per inhabitant. He had actually received of the four hundred millions of obligations he gave, which soon grew to

four hundred and fifty millions, only about \$210,000,000. The difference of 50 per cent or so was absorbed in bankers' commissions and in the discount at which the loans were taken. The amount of the nine loans, the first of which was contracted by Said, the last by Tefik, and the rest by Ismaïl, the amount received by them, and other particulars, are shown in the subjoined table:

DATE.	Face.	Net receipts.	Issued at.	Interest.	Sinking fund.
	Sterling.	Sterling.	Per cent.	Per cent.	Per ct.
1862....	£3,300,000	£2,640,000	83½	7	1
1864....	5,704,000	4,864,000	93	7	4
1865....	3,857,000	2,750,000	90	9	3
1866....	3,000,000	2,640,000	92	7	17
1867....	2,080,000	1,700,000	90	9	3
1868....	11,890,000	7,193,000	75	7	1
1870....	7,143,000	5,000,000	75	7	2½
1873....	32,000,000	17,810,000	70	7	1
1879....	8,500,000	5,992,000	73	7	1
....	£77,004,000	£50,589,000	..	..	..

The loans were negotiated with English and French banking-houses at the exorbitant interest shown in the above table. It is calculated that £90,000,000 has been already drained from the country in interest, that the actual debt of Egypt has been entirely repaid in the interest received by the bondholders, together with interest computed at 6 per cent. The loans of 1862, 1864, and 1866, negotiated with Goschen, were secured by the railroads, telegraphs, etc., and drew only 8½ per cent interest on the net amount; but the bondholders, in their haste to be repaid, attached embarrassing sinking-fund conditions, as did the takers of the loans of 1865 and 1867, negotiated through the Anglo-Egyptian and Imperial Ottoman Banks respectively, for which also 11 per cent annual interest was charged. The annual interest and sinking-fund charges on the £32,923,000 owing in 1870 were about 12 per cent. To meet them Ismaïl was already reduced to ruinous shifts, and his credit rapidly sank, until he was hopelessly enmeshed in the toils of usurers and speculators. The wheat and sugar crops were pledged in advance, interest and compound interest were mounting up, and he was obliged to pay 18 and afterward 28 per cent per annum for advances from the Anglo-Egyptian Bank. The contractors who were constructing the public works for which he had contracted the debts, took advantage of his difficulties to exact an extra margin of profit of 80 per cent. Concessions and contracts were obtained through the venality of officials by which small European capitalists rapidly became millionaires during the period of Ismaïl's reckless financiering.\* In 1873 he might still have been rescued from bankruptcy, by suspending

\* An example of the exorbitant profits reaped by European contractors is seen in the Alexandria Harbor works, which Sir Rivers Wilson made out to be worth intrinsically £1,420,000, but for which Sir George Elliot was paid £2,542,000 in cash, besides the interest during construction. The railroads and all the other enterprises of Ismaïl afforded an equal margin to the contractors.



the sinking funds, but Sadyk Pasha found his own profit in his master's embarrassments, and plunged him in irretrievable ruin. In 1874 an attempt was made to raise £5,125,000 by a forced loan, the Rouznameh internal loan, but not one half of it could be obtained. In 1874 Sadyk proposed to convert the whole debt, and arranged to pay 15 per cent interest and 2 per cent commission to the Anglo-Egyptian Bank for funds for that purpose. In 1876, soon after Cave had given his encouraging report to Lord Derby of the finances of Egypt, Sadyk stirred up the British bondholders by proceeding to convert all the debts into one, called the Unified, and giving the bankers who had advanced money an advantage over the old bondholders. Goschen came as the agent of the bondholders and compelled the Khedive to reverse this arrangement and give the holders of the earlier issues a bonus of 25 per cent of the capital and accrued interest, and a prior claim upon revenues of the railways and other public works. In 1877 the Viceroy handed over his Daira estates to meet the Daira coupons. The revenue from these, the Khedive's private estates, was \$2,250,000 a year. Mr. Romaine, Baron Maloret, and Captain Baring had already taken in charge the state revenues. It was impossible to satisfy the Goschen arrangement, although the fellahen were bastinadoed as they never had been before, and the taxes were collected in advance. When Mr. Romaine proposed to reduce the land-tax so that the people might live, Major Baring, on behalf of the bondholders, refused to allow it. In 1878 the International Courts levied on the Khedive's furniture, and he turned their officers out of his palace, alleging that it belonged to his mother. Sir Rivers Wilson and M. de Bli-gnières came at this crisis, and the Khedive handed over the whole direction of affairs to them, the first taking the rôle of Minister of Finance, the second of Public Works. They took away the only source of revenue which had not been given over to the bondholders—the domains of the khedivial princes, with a rental of \$2,150,000. They cut down the army budget and other items, and proceeded to negotiate a new loan with Rothschild on the security of this property. Baron Rothschild withheld the money when he found that the domains were already affected by a lien. In February, 1879, occurred in consequence the *émeute* of unpaid officers. The European ministers were dismissed by Ismail, as the only way to save his life and prevent a massacre of Europeans. Lord Salisbury and Minister Wad-dington resented this act, and compelled the Sultan to depose Ismail, and appoint his son Tefvik to reign in his place by a *hatt* which was issued in June, 1879.

In July, 1880, the International Commission made a new settlement of the debt, converting the floating debt into bonds, and fixing the total obligations of Egypt as given in the following table:

Unified .....	£57,776,240
Preferred .....	22,387,800
Daira .....	8,512,870
Domain .....	8,499,620
Moukabalah .....	7,500,000
Total .....	£105,876,630

According to the terms of this final settlement the unified debt was to draw 4 per cent interest; the preference debt, 5 per cent. The holders of the Daira and domain mortgage bonds were to have the net revenues from the lands. The Moukabalah debt belonged to a different category. It was a forced loan raised from the peasantry, who paid in the whole of the capital. For the payment in advance of six years' taxes they were promised the remission of half the land-tax after 1885. The debt was nominally £17,000,000, of which certainly £10,000,000 had been paid in by the peasants. The Moukabalah law was a ruinous device of the Khedive, while he was floundering in the nets of the foreign usurers and contractors, to raise money to meet his present obligations by sacrificing the source of supply. The Controllers and Sir Rivers Wilson, acting solely in the interests of the foreign creditors, not only repudiated the solemn engagement of the Khedive, whereby the peasantry were redeeming one half the land-tax in perpetuity, but boldly confiscated the millions which had been wrung from the peasantry. Ismail had himself revoked the Moukabalah law in 1876, and decreed compensation in the shape of 7 per cent annuities running sixty-five years; but at the demand of Goschen, who wanted the £1,500,000 paid in annually by the peasantry on this account, in order to redeem certain of the short loans, he almost immediately re-established it. If it had not been for Nubar Pasha and some Greek capitalists, who had purchased land at the reduced assessments, the holders of the Moukabalah obligations would have lost everything; but through the prayers of these individuals they were accorded £150,000 a year for fifty years. The preferred bondholders were guaranteed—the net receipts of the railways and of the port of Alexandria being reserved to meet the interest. If these sources were insufficient, they were given a prior claim upon the general revenues. The interest on the unified debt was to be paid out of the general revenues after the interest on the preferred bonds was paid up and the cost of Government within the limits fixed by the commission was provided for.

Ismail did not squander the capital borrowed in Europe, as has been often represented, since he actually paid out more than the entire proceeds of the loans on useful and productive public works. The total sum expended on public works during his reign was \$231,320,000, while the entire net product of the loans was \$210,000,000. The expenditures were as follow: On the Suez Canal, over and above the value of shares sold, \$33,850,000; 8,400 miles of Nile canals constructed at \$4,500 a mile, \$37,800,000; 430 bridges built, averag-

ing \$25,000 each, \$10,750,000; 64 sugar-mills, built and equipped with machinery, \$30,500,000; for Alexandria Harbor improvement, Greenfield and Elliot contract, \$12,710,000; to Dussaud Brothers for Suez docks, \$7,000,000; to the Paris syndicate for the Alexandria water-works, \$1,500,000; for construction of 910 miles of new railroads, \$66,805,000; for 5,200 miles of telegraph, \$4,265,000; for erection of 15 light-houses on the Mediterranean and Red Seas, \$940,000.

The value of the improvements wrought by Ismail has been variously estimated. The Suez Canal has been of slight economical value to Egypt. The irrigation canals were the great work of his reign. If they had been constructed by hired instead of forced labor, they would have cost £28,000,000 at the rates paid for excavating the Suez Canal. They have reclaimed no less than 1,373,000 acres from the desert, representing a gross annual product of £11,000,000, and a rental value of £1,400,000. Only half the sugar-factories established by Ismail have been kept at work, and more than two thirds of their cost was a sheer loss. The harbor-works at Alexandria, including a new harbor of 1,400 acres, return only  $1\frac{1}{2}$  per cent in harbor dues on the excessive price paid the contractors; but they are of great economical value to the country. The railroads and telegraphs constructed by Ismail yield 5 per cent on the outlay; £3,600,000 was expended during his reign on the 4,632 public schools established by him, and £900,000 was lost in the village banks which he started to save the fellaheen from the usurers. In the Nile Steamboat Company's shares he lost £155,000. In building palaces and opera-houses, and in entertaining European potentates, he expended over £1,000,000. The extravagances of Ismail were the wonder of the world, particularly his lavish hospitality to travelers of diplomatic, scientific, or artistic note, and his expenditures in introducing the French opera in Cairo. The sums which he spent in getting the Sultan to grant him the title of Khedive instead of that of Viceroy, and to decree the Salic law of primogeniture for the succession, have never been computed. The reason for his embarking so imprudently on a career of dazzling Oriental magnificence and display, and in gigantic schemes of public improvements, without counting the cost, was because he thought that the cotton famine, which yielded such enormous profits for the cotton product of Egypt during the blockade of the American ports, would be permanent, and that the freed negroes of the Southern States would never again work in the cotton-fields.

During the seventeen years of Ismail's reign Egypt certainly made great progress. The population increased from 4,833,000 to 5,518,000; the acreage cultivated from 4,052,000 to 5,425,000 acres; the revenue from £4,937,000 to £8,562,000; the imports from £1,991,000

to £5,410,000, and the exports from £4,454,000 to £13,810,000; the mileage of railroads from 275 to 1,185 miles; of telegraphs from 630 to 5,820 miles; of canals from 44,000 to 52,400 miles. Yet the intrinsic value of Ismail's improvements, the price for which they could be replaced, is not much more than £25,000,000, or one quarter the sum for which he gave his obligations, which are treated as the national debt of Egypt, to exact the payment of which France and England interfered, although there was no precedent for international intervention to enforce the payment of just and regular public loans. The three privileged loans, the domain, Daira, and preferred, which are secured by the most valuable assets of the Egyptian Government, amount to more than this sum, being £30,598,000 in all. For the £42,000,000 which the ex-Khedive actually received from the bondholders, the Egyptians have paid back in fifteen years over £60,000,000 in interest!

Besides the debt which Ismail saddled upon Egypt, he agreed to double the tribute to Turkey for the privilege of changing the order of succession; so that the Egyptians have to pay £5,500,000 a year for the blessing of being ruled by Tefvik Pasha, instead of Halim.

The financial system in Egypt rests on an enormous land-tax which can be collected, owing to the great productivity of the soil. The tax averages £1 per acre on the arable area. The tax yielded £4,793,000 in the beginning of Ismail's reign. The *Ouchory*, or tithe-lands belonging to the rich proprietors, were taxed at the average rate of 7s. per acre; the *Karadjî*, or lands of the fellaheen, at the rate of 23s. per acre; and the *Abadiéh*, or special grants, consisting mostly of new lands reclaimed from the desert, yielded an uncertain revenue, said to average 16s. per acre. The product of the land-tax, at the time of the deposition of Ismail, was as follows:

LAND.	Acres.	Tax.
Ouchour.....	1,829,000	£470,000
Karadjî.....	3,514,000	3,850,000
Abadiéh.....	620,000	500,000
Total.....	5,463,000	£4,820,000

The *corvée*, or compulsory labor on public works, from which the Abadiéh lands are exempt, is a heavy burden upon the Karadjî. Each village has to contribute one fourth of its adult male population for one month yearly to work upon the roads, canals, etc. The *awats*, or wealthy payers of tithes in charity, who hold the *Ouchory*, get their laborers exempted by paying twelve shillings per head annually.

The customs duties in Egypt are light, yielding only about a million sterling. The import duties are 8 per cent, the export 1 per cent, *ad valorem*.

The estimate of revenue made by Major Baring has been made good. The Egyptians have paid the interest on the public debt since



it was reduced to four millions sterling a year. The use of the bastinado in collecting taxes has diminished, and the peasantry have come of their own accord to pay their taxes. The value of land has risen 50 per cent, sellers are few, and the usurers, who used to lend at 60 per cent, have no customers. In 1881 there was a surplus of £321,265, nearly the same in amount as in the estimate. The surplus was calculated for to supply the deficiency in years of a bad Nile, and, when not thus needed, to be applied to the reduction of the debt. Nearly half a million of bonds were canceled with the surplus of 1881. The expenses of the Government were limited to a total of £3,450,000 a year, all revenue above that amount to go to the reduction of the debt.

The funded debt, divided into unified and preference bonds, was fixed by the Council of Liquidation at eighty and a half millions. The Egyptian bonds, as reported in April, 1878, were held as follow:

In England .....	£42,200,000
In France .....	80,100,000
In Egypt .....	6,900,000
Total .....	£79,200,000

The budget of income and expenditure was based on an estimate of £8,400,000, as follows:

REVENUE.	
Land-tax .....	£5,250,000
Railways and telegraphs .....	1,150,000
Taxes and customs .....	2,010,000
Total .....	£8,410,000

EXPENDITURE.	
Consolidated debt .....	£3,520,000
Suez shares .....	199,000
Moukabalah .....	155,000
Tribute to the Sultan .....	700,000
Administration .....	3,450,000
Surplus .....	886,000
Total .....	£8,410,000

**THE CONTROL.**—The intervention of England and France to procure the deposition of Ismail was based upon a sort of protectorate which they had exercised over the dynasty of Mehemet Ali since its establishment by the convention of 1841. The Council of Liquidation, which was appointed by the decree of March 31, 1880, was composed of commissions representing all the powers which had participated in the creation of the Mixed Tribunals—England, France, Germany, Austria, Italy, and Egypt. The chief motive for interference in Egypt was to prevent the speculations in Egyptian credit by the astute creditors from failure through the extravagance of Ismail. The law of liquidation, sequestering the revenues of the Egyptian Government to satisfy the demands of the creditors, was thoroughly carried out under the supervision of the two Controllers who were appointed for that purpose. To meet the semi-annual coupons the fellahen were robbed of their cattle and implements, and flogged and bastinadoed as before. The Controllers secured the bondholders' interests, as they were appointed to do. But, through

the initiative of the French Controller, De Blignières, they did more than this. On the strength of a provision which gave them a seat in the Cabinet with consultory powers, they took into their own hands the whole government of the country. Their administration was in many respects better than the Egyptians had been accustomed to. Certain important reforms were inaugurated. The *kourbash* became a less necessary concomitant in the collection of the taxes. They replaced the Turkish caste, which monopolized the appointments of the civil service, with European officials. This course only substituted one abuse for another. The old officials were inefficient and corrupt, but the Europeans were, many of them, as inefficient, and those who were experienced and capable administrators at home were incapacitated here by their ignorance of Arabic; while all of them drew salaries which were in proportion to those customarily paid in Egypt, and greatly in excess of what they could have earned in their own countries. There were at the beginning of the year 1,272 Europeans holding offices in Egypt, whose salaries aggregated £373,000 a year. The placing of these foreign officials over them was naturally felt to be one of the greatest grievances, and had much to do with the national revolt against the Control.\*

**EVENTS PRIOR TO THE REBELLION.**—The Controllers were at the same time the attorneys of the foreign bondholders, agents of the English and French Governments, and paid officials of the Khedive. They dictated the entire policy of the Khedive. Their action in taking the administration into their own hands, and putting foreigners in charge of all the principal branches of the administration at enormously increased salaries, aroused the enmity of the displaced official class, and jarred against the sentiments of patriotism and independence which exist in every country, although their existence among the Egyptians was contradicted, even after they contemplated war and devastation in conse-

\* The salaries paid to foreign officials in the different departments were reported by Sir Edward Malet, to his government, on May 18, 1882, to be as follows in the different departments, in Egyptian pounds: Cabinet of the Khedive, £3,000; Maleh Sanieh, £696; Presidency of the Council of Ministers, £452; Teft of Gizeh and Gizereh, £436; Ministry of Foreign Affairs, £2,088; Ministry of Finance, £17,200; General Control, £14,101; Direction of the Cadastral Survey, £26,787; General Inspection of the Octrois, £2,770; Light-house Service, £10,289; Mint, £144; Ministry of War, £3,351; Ministry of Marine, £2,691; Ministry of Public Instruction, £7,905; Administration of the Wakf, £2,094; Ministry of the Interior, £3,975; Government of Alexandria, £750; of Port Said, £370; of Suez, £163; of El Arish, £84; Municipality of Alexandria, £540; Cairo Police, £1,567; Alexandria Police, £2,793; Suppression of the Slave-Trade, £2,052; Marine Sanitary Council and Quarantine, £5,290; Council of Public Health, £6,084; Ministry of Justice, £6,843; Ministry of Public Works, £29,216; Railroad Administration, £29,761; Telegraph Administration, £6,193; Port of Alexandria, £3,681; Administration of Customs, £16,647; Administration of the Post, £19,509; Postal Steamer, £16,941; Salines, £162; Administration of the Public Domain, £25,042; Dairah Sanieh, £19,672; Public Debt, £16,227; Parquet Administration, £3,088; Court of Appeals, £14,971; Alexandria Court of the First Instance, £22,344; Court of the First Instance at Cairo, £14,212; Court of the First Instance at Mansourah, £8,869. Total, £373,491.



quence of these feelings. But there were sufficient grounds for disaffection already in the sudden revolution of the financial policy which the bondholders put upon Egypt in order to rescue their profits. The army was the first and the most powerful class to feel the pressure. The fact that the officers had not been paid for a long time, and the foreign creditors allowed no provision to be made for their pay, was the cause of the disturbances which furnished the occasion for the dethronement of Ismail Pasha. The disbandment of a large portion of the army, reducing a great majority of the officers to half-pay, caused a profound and perpetual dissatisfaction among the influential military class. Ismail's army had numbered 200,000 men, so that there were as many as 2,000 officers for the little army of 12,000 men.

Then the ousting of the native officers by the Turkish element, while complicating the situation, rendered the discontent more acute, gave it a more national and patriotic character, and brought it to an issue between the dissatisfied native officers and the Khedive. The affair of February 1, 1881, when the Khedive laid a treacherous plot to seize the persons of the protesting colonels, caused an open rupture. The colonels were in constant fear of secret assassination, and the Khedive of a military revolution. At length the timid Mohammed Tefik mustered up courage to attempt to remove the incubus, but his order to one of the three regiments to march to Alexandria was answered by the rebellious demonstration of September 9, 1881. The mutinous colonels at the head of the troops demanded: 1. The increase of the army from 12,000 to its normal and maximum legal strength of 18,000 men;\* 2. The dismissal of Riaz, who they thought was aiming at their lives, and the appointment as chief minister of Sherif, whose known integrity precluded the suspicion of a design to destroy them after their safety had been promised;

3. The convocation of a Chamber of Notables or National Parliament. The Khedive agreed to the change of ministers, and Sherif Pasha was prevailed upon to accept, with much reluctance, the duties of the trying position. After coming to an agreement with the military party, according to which he was to carry out the recommendations of their military commission and they were to allow one regiment to be sent away from Cairo, Tefik would make no promise to raise the strength of the troops, as it was subject to the international engagements by which the budget was limited. The matter of convening a Chamber of Notables he agreed to take into consideration; and finally, on the advice of Sherif, he decided to humor the newly-awakened national and popular aspirations which had been propagated by Arabi Bey and his adherents. The sudden enthusiasm of the intelligent and patriotic Egyptians for parliamentary institutions was due to the fact that their constitutional ruler had sunk into the position of a servile instrument of the foreign emissaries, and they thought that the Governments of England and France would not refuse to restore the usurped national liberties if a body of the most judicious and respectable men who could be selected, fulfilling the conditions of representative government, stood ready to resume them. Arabi, after hesitating for some time, obeyed the orders of the Khedive, and retired to Wargla, near the canal.

DIPLOMATIC CORRESPONDENCE.—At the prospect that the Egyptians would take the management of their internal affairs out of the hands of the Control, the two protecting and the suzerain powers began to stir themselves.

It became evident that harmony of action was difficult. England was willing at this time to have Turkey send a military force to Egypt under proper guarantees. France set her face against any action of Turkey; and England, who had thus far followed the lead of France, acquiesced in this also. The Sultan, in spite of protests, sent two commissioners to Egypt with "compliments and advice." They arrived at Cairo October 6, 1881. As a counter-move, at Lord Granville's suggestion, an English and a French ironclad were stationed in Alexandria Harbor, ostensibly to diminish the danger of a panic among the foreign population. The Sultan remonstrated, October 11th, on the ground that the menace of the ships would cause an agitation among the Arab population which would "not unlikely lead to a general revolution," while at the time, according to the reports of the Turkish emissaries, perfect order existed. Lord Granville replied that if disorder was at an end the recall of the Turkish envoys "would imply the termination of the incident, and would naturally be followed by the withdrawal of the ships." Hence the sudden return of the commissioners to Constantinople on October 18th. The ironclads sailed away two days later. In a dispatch of Lord Granville, dated November 4, 1881, in which "the

\* One of the principal demands of the military party, which was repeated by the Chamber of Notables, was that the army should be recruited up to its full lawful strength of 18,000 men. The dissatisfaction of the officers and men at the reduction of the army in 1879 was the first breath of the revolutionary storm. The army had counted 50,000 men under arms, with 200 guns, without the irregular troops. The firman of Tefik's investiture fixed the maximum strength at 18,000 men, and the pruning operations of the Controllers left only 12,000 men under arms. The Khedive was given the appointment of officers of the rank of colonel and under, but the Sultan reserved the right of nominating the general officers. The practice of impressing recruits arbitrarily was done away with, and the principle of universal military service was introduced by a law which went into force November 1, 1880. This law fixes the length of service at twenty years, four years of active service, six as *Redifs*, and ten as veteran reserves. As the military budget was kept down to the figure fixed by the Control, 373,000 Egyptian pounds (\$1,846,000), no attempt could be made to carry out the military law. The military age commences with the twenty-first birthday. The annual recruit has partly been chosen each January by lot, but evasions by bribery have been frequent; partly it was obtained by volunteer enlistment of fresh recruits, or soldiers who had served out their term of active duty. The uniforms, equipments, and arms of the Egyptian army were of European pattern. The infantry were armed with Remington rifles, the artillery with Krupp breech-loaders, most of them of 24-inch bore.



tie which binds Egypt to the Porte" was spoken of as a valuable safeguard against "foreign intervention" and "rival ambitions," the first sign was given of an intention to abandon the policy of constant co-operation with France on which the dual Control rested, and to act in conjunction with the Porte. Finally, an accommodation was reached between the English and French Cabinets, and a dual note, composed by Gambetta, was dispatched.

**THE NATIONAL PARTY.**—The programme of the National party embraced the following six points:

1. The National party accepted the existing relations of Egypt to the Porte, acknowledging Sultan Abdul-Hamid Khan as suzerain and rightful Caliph, but would resist to the uttermost any attempt to invade national rights or to degrade Egypt to the state of a Turkish pashalik, relying also upon the protection of the powers and particularly on England's guarantee of administrative independence.
2. They declared their loyalty to the Khedive and pledged themselves to support Mohamed Tevlik as long as he ruled in accordance with the laws and the principles of justice and in fulfillment of the promises made to the Egyptian people in September, 1881.
3. They acknowledged the services of the Governments of England and France to Egypt in furthering liberty and justice, and considered the European Control a necessity entailed by the financial situation, deeming its continuance the best guarantee for the welfare and prosperity of the land, and accepting the Egyptian debt as binding upon the national honor.
4. They renounced every connection with those who, in the interest of the Powers, are jealous of the independence of Egypt and seek to disturb the land; aware, however, that it is impossible by a merely passive attitude to preserve the liberties of a land which is governed in part by a caste to whom liberty is odious, the National party confided their interests for the present to the protection of the army, which for that purpose should be brought up to its full effective force of 18,000 men.
5. They declared the Egyptian National party to be a political, not a religious, association, which would receive into its ranks men of all races and creeds without distinction, Christians and Jews as well as Mohammedans, assuring equal rights to all.
6. They announced as the general object of the National party the moral and intellectual regeneration of the people through the better observance of the laws, the spread of intelligence and improved education, as well as through political freedom, which they esteemed the life-spring of the nation; and in pursuing this aim they relied not only on their own strength but upon the sympathies of the European nations which enjoy the blessings of self-government.

The National party complained particularly of the employment of strangers in the administration when there were Egyptians who would discharge the duties better at one fifth the cost. The exemption of Europeans from taxation and from obedience to the general law of the land were injustices which they requested to have abolished. The immunity of the fine residences of European merchants from all taxation, while the huts of their humble Egyptian neighbors were taxed 12 per cent on their valuation, was one of the international engagements established by the capitulations of the Sultan. The consuls-general possessed the power of conferring foreign nationality on Egyptians, and procuring thus their exemption from the tax on real estate and the tax on professions. The

effect of the conflicting attributes of the local police and the consular authorities was that, while the slightest injury practiced upon a European by an Arab was severely punished, Arabs could be defrauded, plundered, assaulted, and even murdered with impunity.

The classes which rallied around the national cause were: 1. The army, with the exception of the Circassian officers. 2. The learned Musulman class, consisting of the doctors and scholars of the Azhar University. 3. The Arab and Egyptian merchants of the towns. 4. The native artisans who read, or had read to them, the Arabic journals. 5. The village sheiks and their representatives, the members of the Egyptian Parliament. 6. The Coptic Christians, numbering about half a million. 7. The small section of the fellahen who lived within the influence of the thought of the towns. 8. The semi-nomadic Bedouins of the Delta. 9. The native and Levantine Jewish communities. 10. Most of the Syrian Christians, who are the most active, progressive, and intellectual section of the Egyptian population.

Opposed to the National party were: 1. The adherents of the vice-regal family, officials and courtiers, mostly Turks and Circassians, including the majority of the persons who speak French and mingle with European society. 2. The Circassians. The class called "Circassians" in Egypt are the descendants of the Circassian boys and Mamelukes who ruled Egypt in the last century. The Circassians and Turks form a wealthy aristocracy, but number together scarcely 15,000. 3. The Greeks, who are the financiers and money-lenders, and number some 34,000. 4. A portion of the Syrian Christian community; also money-lenders and speculators. 5. The European community.

**THE CHAMBER OF NOTABLES.**—The outcome of the military revolt of September 9, 1881, was the convocation of a Chamber of Notables, upon the advice of the new Prime Minister, Sherif Pasha, in compliance with the demands of the military party. The delegates to the Parliament were elected ostensibly by popular suffrage, every Egyptian over twenty-five years of age being entitled to a vote; but outside the large towns the sheiks, or head men of the villages in each district, chose the representative at an electoral convention. Officials were directed not to interfere with the free choice of delegates. The objects of the convocation of the Notables, as laid down by Sherif Pasha in the project submitted to the Khedive, and announced in the speech from the throne at the opening of the Chamber, December 26, 1881, were to consider generally the requirements of the provinces, the needed reforms in the various administrations—and more particularly the question of forced labor on public works—the collection of taxes, and the establishment of provincial councils. The tribute, the public debt, and all charges on the country arising out of the law of liquidation or



any international contract, were excluded from parliamentary discussion.

The Chamber of Notables was made up from among the *Omdes*, or district magistrates, of whom there are five or six hundred in Egypt. The Omdes are elected by the Sheiks-el-Beled, or village chiefs, of each district, from out of their number. The Sheiks-el-Beled are usually the wealthiest and most influential land-owners of their communes. They obey the Omdes as blindly as the fellaheen obey them. The entire administrative system is in the hands of these two grades of local magistrates, who owe their position to the choice of the people, among whom they must permanently reside.

The national movement was not set on foot by the military party, but was already in progress. The best men in Egypt of both religions were studying over some practical means of escape from the grasp of the united dominion. The grievances of the half-starved officers of the army and displaced officials were only incidents of a movement which proceeded from a sense of wrong pervading all classes. The native merchants and the city population had murmured for years at the privileges secured by firmans, which enabled their foreign competitors to leave them behind, and the hearts of the fellaheen were full of sullen rage against the invading horde who fattened on their labor. The public debt, which consumed two thirds of the taxes that ground them to the earth, was known to be a usurious imposition; but it was of Ismail's making, and its payment was required with unbending rigor by the Western powers. It was, therefore, accepted as a *kismet* from which there was no escape. The injustice of the repudiation of the Moukabalah, however, rankled in their souls. The shrewd and prudent leaders of the National party based their appeal for self-government on the full satisfaction of the claims of the bondholders as a prime condition. Sherif Pasha, the new Prime Minister, was, as the most distinguished and respected statesman in Egypt, a fit representative of the national aspirations before the outside world, while Sultan Pasha, the President of the Assembly of Notables, was more distinctly a guide and intellectual leader of the movement.

The project of organization, submitted to the Chamber by Sherif Pasha, embodied the usual forms of representative government, but did not permit it to trench upon the ground occupied by the Control. The members were to be elected for four years, to draw pay, and enjoy immunity from arrest. The sessions were to be annual, and opened by a speech from the Khedive or a delegated minister. Ministers or deputed officials could take part in the discussion. Ministers were to be responsible for acts infringing on the rights of the Parliament, and to be bound to furnish explanations of matters within the jurisdiction of the Chamber. The Khedive could dissolve the Chamber, but must order a new election, to take place

within four months. The Chamber should discuss and vote upon every law submitted by the ministry, and could express an opinion upon the budget. They could pass no laws except those laid before them by the ministers. No new tax could be imposed without being voted by the Chamber. The Khedive and ministers could act without the Chamber in urgent cases, but must communicate their proceedings. The old Chamber, established by Ismail Pasha in 1865, was a merely advisory body. Sherif Pasha wished to revive the Parliament in 1879, and introduce the principle of ministerial responsibility.

The Chamber of Notables, upon assembling, prepared another project, which would give them full constitutional powers. They declared, as had Arabi and the National party all along, that the Control and the liquidation settlement were inviolable; but they demanded that the budget should be submitted to them. As the estimates for 1882 had been prepared, they did not ask to vote the appropriations for the current year, but insisted on the right to discuss and vote supplies thereafter. They demanded full ministerial responsibility, requiring that the Khedive should not retain his ministers after they had lost the confidence of the Chamber. Also the initiative in legislation, to the extent that the ministry should consider laws originating in the Chamber; and, if it would not ratify them, that it should state good reasons for its refusal. They claimed, furthermore, the right to investigate the conduct of officials.

Sherif Pasha possessed the confidence of the English, and hoped to solve the difficulties of the situation. But the Nationalists insisted on giving the Notables the control of the administration and of public expenditures. On the 4th of January Arabi Bey was taken into the Cabinet as Assistant Minister of War. Weeks were spent in trying to negotiate a compromise between the ministers' project of organization and that of the Notables; but, the Controllers-General, instructed by their governments, set their faces firmly against all the demands of the Chamber.

The identical note of the Western powers, in which they declared that they would defend the Khedive from all inner and outer dangers, was based only on a vague and fugitive agreement. It was presented January 7th, and contained the following menacing language, which was understood to veto the demand for constitutional government in Egypt, and to warn the Porte against taking independent action:

The two governments are closely associated in their determination to ward off by their united efforts all causes of internal and external complications which might menace the order of things established in Egypt. They have no doubt that the publicly expressed assurance of their intention in this respect will contribute to prevent dangers which the Khedive's government might have to dread, which dangers, moreover, would certainly find England and France united to face them.



Lord Granville qualified his signature with the verbal explanation that he did not commit his country to any definite line of action. The Porte began, January 13th, to protest and to appeal to the European powers. Other powers insisted that Egyptian affairs were the concern of Europe, Italy taking the lead. On February 2d the Porte received an identical communication from the Russian, German, Austrian, and Italian embassies declaring that the *status quo* could not be modified without the consent of the great powers and the suzerain power. Gambetta, spurred on by the prospect of European interference and Turkish intervention, pressed the English Cabinet to act upon the note when the Notables showed themselves intractable. French marines were detailed for the expedition, and Great Britain was invited to co-operate with Indian soldiers. He urged that England's interest in the sea-route to India and France's position as an African power prompted them to speedy action, of which the powers could not justly complain. Lord Granville would not hear of a joint expedition, and, January 30th, proposed that Turkish troops should be employed to re-establish order in Egypt. Freycinet, on coming into the French premiership, was anxious to dispel the fears of an adventurous French policy which Gambetta had created. The attitude of France was immediately reversed. The new French minister opposed intervention, and proposed that the Egyptian Nationalists should be allowed to attempt the reforms which they had at heart. In one point the French policy remained firm and consistent, in resistance to the armed intervention of the Porte, even as the mandatory of the powers. Any exhibition of the power of the Padishah in Africa was supposed to imperil the peace of the Algerian dominions of France, where dangerous religious passions were already smoldering, and questions of sovereign rights had arisen which had created an estrangement between the republic and the Porte. The joint note of the four powers gave England and France an excuse for inaction. The British and French Cabinets addressed an invitation to the four powers for an exchange of views. Freycinet, for the sake of pleasing the Gambettists, gave offense both to England and to the protesting powers by sending instructions to Consul-General Sinkiewicz to maintain the preponderant position of France. The influence of France was further enfeebled by a conflict which arose between the French Controller and the consul-general, in consequence of which the restless and ambitious De Blignières was retired and M. Bredif appointed in his place.

The difficulty between the Government and the Notables came to a head February 3d.\* A

\* Why the British Government, if they had no ulterior purposes in view, refused to allow the Notables to attempt constitutional government, is a question involved in Egyptian darkness. Sir Edward Malet, the British consul-general, when interrogated as to the effect of allowing the Notables to vote the budget, replied that they might cut off the salaries

deputation from the Chamber offered Sherif Pasha the alternative of accepting their project of the powers of the Legislature or resigning his office. Sherif referred them to the Khedive, and, when called into the conference by the Viceroy, handed in his resignation. The deputation then requested the Viceroy to name a Cabinet. Tefvik answered that he had perfect confidence in Sherif, and that they must name their own Premier. After at first declining to infringe upon the prerogative of the Khedive, the deputies returned and presented the name of Mahmoud Baroudi, who was invited to form a Cabinet.

Arabi Bey, the popular leader of the revolt against the Europeans, emerged as Minister of War and Marine. The other appointments were: Mustapha Fehmi, Foreign Affairs; Mahmoud Bey, Public Works; Abdullah Fehmi, Public Instruction; Fetme, Justice; Ali Sadok, Finance; Hassan Kerey, Wakfs (Mosques and Charities). On February 6th Mahmoud Baroudi presented the programme of the new ministry, a Constitution such as was demanded by the Notables, infringing in no wise on the rights of Europeans and the financial settlements which were secured by international engagements. In a few days he announced to the Chamber that the Khedive had delegated to them the right to vote the budget in virtue of the powers conferred upon him by the firmans of the Sultan. The Controllers, Colvin and De Blignières, protested that the khedivial decree of 1879 gave them a seat in the Cabinet and a voice on all questions of finance. Their only legal argument was that the right to give advice implied that their advice must be followed.

The resistance of the powers to the constitutional demands of the Egyptians, and their threats of military intervention, gave the military party the lead. Arabi and six other colonels were made generals with the title of pasha, and twenty officers were promoted to the rank of colonel. There were 500 promotions made in the space of three months. Arabi talked of raising the effective of the army to 20,000, projected an arsenal at Suez, and planned the fortification of the sea-coast to prevent the landing of European troops. The anti-European feeling found vent in the dismissal of European clerks. The Chamber discussed the question of placing the cadastral survey under the direction of natives.

On the 11th of April Arabi Pasha arrested nineteen Circassian officers, and accused them of having formed a conspiracy to assassinate him and the other generals. No Circassian had received promotion, and Arabi was supposed to have formed the intention of sending them all to the Soodan. A number of Arab officers were subsequently arrested, among them Osman Zefki, former Minister of War,

of the officers of the survey, which were not provided for in the capitulations; so that it appears as though a question of salaries for some of the "locusts" led to war in Egypt.



on the charge of plotting in favor of the ex-Khedive. Arabi showed great fear of the machinations of Ismail. He had refused permission for his invalid daughter to land, and banished his business agent. There were fifty arrests made altogether, and on May 1st a court-martial condemned forty officers and two civil functionaries to loss of rank and banishment. Nualti Pasha, who was with Ismail at Naples, was condemned in *contumaciam* as the chief of the plot. The consuls protested. The Sultan was indignant that Circassians and officers whom he had decorated should be treated ignominiously. The Khedive withheld his signature to the sentence. He finally commuted it to simple exile, a decision which was displeasing to the ministers. They convoked the Chamber for May 14th, without the authorization of the Khedive, to lay the matter before it. Mohamed Tefvik, in his attitude toward the seditious ministers, showed unusual vigor. All intercourse was suspended between them and between the ministers and the Control. The English and French consuls and the Porte commended the course of the Khedive. The military threatened to depose Tefvik. The Notables disappointed them by refusing to sit illegally. Sultan Pasha declared that the Bedouins would march to Cairo to defend the Khedive, and Sherif Pasha and the Egyptian Sheik-ul-Islam came to his support. Finally, the President of the Notables and the late Prime Minister, with the assistance of the two consuls, arranged a reconciliation. Great Britain and France had by this time again composed their jealousies, and the Cabinets had agreed upon common action. They gave notice to the powers of a joint naval demonstration, for the purpose of fortifying the authority of the Khedive and preserving the *status quo*. The Porte, which lost no opportunity for asserting the authority of the Sultan in Egypt, addressed a reproof to the Egyptian ministry for summoning the Chamber unconstitutionally, and reminded them, in reference to their declaration that the landing of Turkish troops would be resisted with arms, that Egypt formed an integral part of the Ottoman Empire. This was offset by the watchful powers in a dispatch from the Khedive, rebuking the Turkish Prime Minister for holding irregular communications with his Cabinet.

ANGLO-FRENCH NAVAL DEMONSTRATION.—The English and French squadrons united in the Bay of Suda, off Crete. Mahmoud Pasha Baroudi appealed vainly to the consuls-general for assurances that the fleet would depart again at once when they entered Alexandria Harbor, protesting that all motive for a naval demonstration was taken away by the reconciliation of the ministers with the Khedive. Arabi then determined to answer the naval demonstration with a demonstration of Egyptian independence. He called on the provincial authorities to send the reserves to Cairo. They declined to do so without a formal command from the

Khedive. On the 20th of May the Anglo-French squadron anchored in Alexandria Harbor. The diplomatic representatives of the powers parleyed with the military party, and M. Monge, the French consul at Cairo, tried to bribe Arabi and the generals to leave the country with tempting offers of a career and emoluments. The warlike preparations went on. Artillerists were sent to Alexandria and Damietta. Torpedoes were sunk along the coast. At a council of war, held in the Abdin barracks, at Cairo, the generals took an oath to defend the country against any foreign intervention, and the sheiks and Bedouins joined them as against European, but not against Ottoman, intervention. They applied to the Controllers for money to prosecute the defensive preparations, and were naturally refused. The idea of abolishing the Control was discussed, but they reflected that it would render intervention inevitable, and would probably paralyze the action of the Porte and the East European powers which were opposed to the Anglo-French preponderance. The Minister of Wakfs had the disposal of a fund which was out of the reach of the Control. He at once handed over £300,000 sterling. On May 25th the French and English consuls made a formal demand that Arabi Pasha should undergo temporary expatriation, his coadjutor Ali Abdallah depart for the interior, and the ministry resign, promising their good offices to obtain amnesty for all who had rebelled against the authority of the Khedive. Lord Dufferin and the Marquis of Noailles at Constantinople took pains to explain to the Porte that the rights of the Sultan could not suffer through the dual intervention; that Turkish co-operation was unnecessary, since the sovereignty of the Sultan had not been called in question; but that if it should become necessary later he should be invited to participate. Abdul-Hamid knew the worth of such promises, and foresaw that an Anglo-French military occupation of Egypt would deprive the Padishah of the last shred of his sovereign rights. Since he was excluded from participation in the intervention, he did his utmost to paralyze the action of France and England in Egypt by appealing to the European powers to check their belligerent designs, and by giving encouragement to the National party in Egypt. In obedience to the ultimatum of the two powers, the ministers handed in their resignations to the Khedive. Mahmoud Baroudi artfully explained that they had unanimously advised the Khedive to return the Anglo-French note, on the ground that the foreign intervention was an invasion of the rights of the Sultan, but, since he had accepted it, their only course was to resign. Mohamed Tefvik accepted their resignations, and issued, at the same time, a proclamation declaring that the fleet had come for a peaceful purpose, ordering the enrollment of the reserves to be stopped, and announcing that those who had arrived at Cairo would be sent back to their



homes. He called to him a number of officers, among them Ali Fehmi and Abdallah Pasha, and announced that he would exercise the command of the army in person. He called upon them to submit to the conditions imposed by the consuls-general. They answered flatly that they would submit to no foreign dictation but that of the Porte. Tevfik sought in vain for new ministers. Sherif Pasha could not be persuaded to take office at this time. Members of the Chamber of Notables came to the Viceroy and begged him to retract his acceptance of the consular note, and retain Arabi as Minister of War. The whole corps of officers came on a like errand, and expressed themselves in forcible language. The military commandants at Alexandria sent word that they would take orders from no one but Arabi, and that they would not answer for the maintenance of order twelve hours if he were not reinstated. The deputies, the officers, and the ulemas met before Sultan Pasha and united in a demand for the retention of Arabi Pasha, while the officers talked about deposing the Khedive. Tevfik was still firm, and told Sultan Pasha, who presented the address, that the officers abused the name of the Porte, since the Sultan had sent a dispatch commending his conduct. Directly afterward he received another message from the Sultan, condemning the military party, and telling him to recommend moderation to all, so as to escape foreign intervention. Deputations from the university, from the native merchants, from every respectable body, brought the same request to the Khedive that he had received from the officers, notables, and ulemas. Pressed by all Egypt, he at last gave way, and restored Arabi to the Ministry of War. At this time the Khedive received a telegram from the Porte, in which the Sultan offered to send a commissioner to Egypt if the Khedive would make a formal request to that effect. Mohamed Tevfik applied to the consuls for advice. Here again the discordant note in the Anglo-French concord destroyed the effect upon the Egyptians and upon the Porte of the ministerial declarations, the common ultimatum, and the united squadrons. Mr. Malet did not object to the coming of a Turkish commissioner if it would prevent disorders, while M. Sinkiewicz was unqualifiedly opposed. France was constrained to give way when the European powers unanimously approved the Turkish mediation, and confined her efforts to preventing the intervention from taking a military form. A note of the dual powers, dated May 29th, demanded that the Sultan should confine himself to expressing approval of the course of the Khedive, and should command Arabi Pasha and the other military chiefs to come to Constantinople and give an account of their conduct. The Sultan refused to serve as the instrument of the two powers; so that they were restricted to demanding that the action of the Porte should not go beyond the sending of an envoy charged with the mission of inviting the army

to submit to the Khedive. De Freycinet, in his efforts to preserve the preponderance of France and the anti-Mussulman ends of the Gambettist policy, while avoiding its perils and adventurous aims, was left in the lurch by the British Cabinet, and found France completely isolated. Sustained by a vote of confidence against the objections of the Opportunists, he abandoned the policy of exclusion and preponderance, to enter the European concert. He proposed a conference of the ambassadors of all the powers at Constantinople, for the definite settlement of the Egyptian question. A dual note, based on Granville's declaration to the powers of the 11th of February, invited the Porte to the conference. It premised the preservation of the *status quo*, and the existing international engagements, which was unacceptable to the Porte and scarcely met the views of the powers. The Porte did not hesitate about sending the commission. Dervish Pasha was intrusted with this delicate business, with Achmet Ratid, Lebib, and the Sheik Ali Metstad, for his associates, and attended by an aide-de-camp and a numerous suite. The Sultan then informed the powers of their mission to restore tranquillity, maintain the *status quo*, and sustain the Khedive. In a second circular on the subject Said Pasha asserted that the regulation of Egyptian affairs was a prerogative of the Sultan, and that he saw no necessity for a conference. In Egypt, Arabi was still the only minister appointed, the master of the army, and the hope of the Nationalists; while the Khedive was powerless, and despised as the slave of the Europeans. The French consul attempted to constrain Arabi to submit to the ultimatum, and proposed to the Khedive to make Ragheb Pasha Prime Minister, and Abdallah Minister of War. Arabi declared, contemptuously, that the threats of France and England were as false as their promises; that if they should venture to intervene they would meet with a vigorous resistance. The Turkish commissioner was received with open arms by the Khedive. The National party professed devotion to the right, of the Sultan, and seemed disposed to place all their trust in the action of the Porte and the conference. Ragheb Pasha formed a ministry which was in accord with the Khedive. The truce in the political conflict was complete. There was every prospect that the appeal of the Egyptians to Europe for administrative independence would be eventually successful; that the conference would insist on the restriction of the Control and the diplomatic agents of the two powers to their legitimate functions, as the only peaceful solution of the question. The popular passions, however, rose higher with the prospect of the deliverance of the Egyptians from their enslavers. The smoldering resentment, hatred, and jealousy of the populace of Alexandria, where the privileges enjoyed by foreigners, their arrogance toward the natives, and the ostentatious display



of their extortionate accumulations were constantly seen and felt, were wrought up to a dangerous pitch, after long years of repression, by the sight of the ironclads in the harbor and Arabi's warlike preparations. The Europeans, who had all along clamored for intervention, were more overbearing and exasperating in their bearing than ever. On the 11th of June the mutual animosity culminated in riot and bloodshed in the streets of Alexandria.

**ALEXANDRIA RIOTS.**—In an ordinary street fight a Maltese stabbed an Arab. This incident drove the native population into a fury, just as a few months before a riot was imminent when a soldier was murdered by a supposed Italian. The Arab population of Alexandria collected in mobs and soon worked themselves into such a state of excitement that they began to break up the chairs and tables in the streets, and set upon every European who was found abroad. They burst into shops and invaded the European quarter, but were kept aloof by a fusillade from every house. About seventy Europeans and six or seven hundred Arabs were slain. The following day the Khedive, at the suggestion of the Turkish commissioner, imposed upon Arabi Pasha, who was the actual head of the military forces, the responsibility of keeping order. This arrangement, which was announced to be only provisional, completed the consternation of the Europeans. They fled panic-stricken, and in a few days all the wealthy residents had left Egypt, while the streets of Alexandria were filled with their starving dependents. On the 13th the Khedive proceeded with Dervish to Alexandria. The powers sent more ironclads, and labored with the Porte to have Turkish troops sent to Egypt. The Sultan refused to enter Egypt to execute the behests of the Western powers, and still held aloof from the conference. On the 16th of June, through the intercession of the German and Austrian consuls, the Khedive accepted a new ministry, which, however, the dual powers refused to recognize. Ragheb was retained as President of the Council, and Arabi Pasha was again made minister. Business was at a stand-still after the flight of the Europeans. A large proportion of the city population were left without food or shelter. The authority of the Khedive was effaced. He acted under the directions of Dervish Pasha, who was treated with respect. The Sultan's agent was secretly fomenting the rebellion. The only activity was in the bellicose preparations of the military. The government, as far as it existed, was in their hands. The country was aflame with the spirit of war. Arabi Pasha by his speeches infused into the meek fatalists of the Delta a holy ardor for the overthrow of the foreigner. While he enlisted and drilled soldiers, the conference wasted its time in interminable negotiations with the Porte. The Sultan sent a decoration to Arabi Pasha at this time. Toulba Pasha, the commandant at Alexandria, mounted guns and trained them

upon the ironclads. With boundless energy he constructed new forts and made thorough preparations to resist any attempt to land troops.

**MEETING OF THE CONFERENCE AT CONSTANTINOPLE.**—The conference met June 23d, at Therapia, on the Bosphorus, in the villa of Count Corti, the Italian ambassador, and dean of the diplomatic corps at Constantinople. Their first act was to sign a self-denying protocol, whereby each power promised not to be governed by its own interests, but to accept whatever solution of the Egyptian question the conference decided upon. The conference next approached the delicate question of the attitude of Turkey. They could not settle the affairs of Egypt without the assistance of the Porte, which had already formally declared the conference to be useless, and which met their overtures with the accustomed Fabian subtleties of Ottoman diplomacy. The next acts of the plenipotentiaries after the signature of the protocol of disinterestedness were a resolution renouncing isolated action, and one acknowledging the sovereign rights of the Sultan.

**BOMBARDMENT OF ALEXANDRIA.**—The English and French Cabinets saw that the Egyptians and the Porte would succeed in ousting them from the direction of Egyptian affairs, and that the council of ambassadors would approve the new state of things which was being established in Egypt. Sir Beauchamp Seymour, the admiral of the British fleet at Alexandria, had instructions, dating from the 15th of May, to land a force if necessary to protect the Khedive. By the act of this commander, England evaded the self-denying protocol and commenced a course of active intervention, while pretending not to have broken the European concert, nor to have departed from the engagements entered into at the conference. Egyptian soldiers to the number of 6,000, it was estimated, had been busily constructing earthworks and mounting guns since the 29th of May. On the 6th of July, Sir Beauchamp Seymour pretended to discover that the fortifications constituted a danger to his ships, and sent an ultimatum demanding that the work upon them should cease, or the fleet would open fire. The Porte demanded through the Turkish ambassador at London that the bombardment should be countermanded. Toulba Pasha, commandant of the garrison, protested that no hostile purpose was intended, and appealed to the "well-known humanity" of the English commander. The consuls of the foreign powers at Alexandria, surprised and alarmed at the sudden belligerent announcement, begged the British admiral to withdraw his menace until they had used their offices as mediators, but he held to the ultimatum. Promises were given that the works should be discontinued, and they were apparently deserted in the day-time, but it was seen that the guns were manned by flashing the electric light upon them on the night of the 8th, and a reconnoitering party



observed men mounting cannon in one of the minor forts. Declaring this a breach of the engagement, the commander of the fleet demanded on the 9th that the forts should be temporarily surrendered to the English, to be

The fleet was divided into two squadrons, one working inside the outer harbor, the other engaging the forts along the sea-front, while the Inflexible and the Téméraire placed themselves in the Corvette and the Bourgas Passes,



VICE-ADMIRAL SIR FREDERICK BEAUCHAMP PAGET SEYMOUR, G.C.B., COMMANDING THE MEDITERRANEAN SQUADRON AT ALEXANDRIA.

dismantled within twenty-four hours. All the foreign ships now left the harbor, while the British ironclads took position and cleared for action.

The western harbor, divided by a mole into the outer and inner harbors, was defended by Fort Ras-el-Tin at the extremity of the peninsula on which the town is built; by Fort Marabout, five miles distant, at the western end of the outer harbor; and by the powerful Meks fort, with eighty-one guns, at the central point of the crescent-shaped shore. The latter was supported by a multitude of outworks along the shore. Marsa-el-Kanat fort, on the shore of the outer harbor, was unmanned. Along the sea-wall of the town were, besides the Ras-el-Tin fort, with twenty-four guns, Forts Aida and Castle Pharos on the other jutting arm of the peninsula, the latter overhanging the mouth of the eastern harbor. The western harbor is approached through three passes winding among spits and shoals, called the Corvette, the Bourgas, and the Marabout Passes.

constituting a reserve squadron ready to support either division. The strength of the eight ironclads which with the gunboats Bittern, Condor, Beacon, Decoy, and Cygnet, composed the attacking fleet, was as follows:

VESSEL.	Inches armor.	Guns.	Horse-power.	Tons.
Inflexible .....	16-24	4 81-ton.	8,000	11,406
Superb .....	10-12	16 18-ton.	7,480	8,760
Monarch .....	8-10	4 25-ton. 2 64-ton.	7,842	8,322
Sultan .....	6-9	8 18-ton. 4 12-ton.	8,629	9,286
Alexandra .....	8-12	2 25-ton. 10 18-ton.	9,492	8,615
Téméraire .....	8-11	4 25-ton. 4 18-ton.	7,700	8,540
Invincible .....	6-8	10 12-ton.	4,882	6,084
Penelope .....	5-6	10 12-ton.	4,702	4,894

The British force counted altogether 8,539 men and 102 guns. No two of the ironclads were of the same design. The three broadside ships, the Alexandra, Sultan, and Superb, composed the outer squadron, which was given the

task of silencing the forts along the sea-front, beginning with Ras-el-Tin and ending with Fort Pharos. The Alexandria is of the box-battery type with deeply recessed bows for the purpose of securing end-on fire. The Sultan is of the same type, but less heavily armed and plated. The Superb, originally built for the Turkish Government, is of the type of the Hercules. The Inflexible and Téméraire steamed along the

of men at once, dismount guns, and blow up magazines in the earthworks. Two of the broadside ships were at anchor from the first, and after a while all the ships of both squadrons anchored to secure more accurate firing. The gunboats remained in motion, and escaped almost without a shot.

The bombardment began at seven o'clock on the morning of the 11th of July. It lasted ten



HER MAJESTY'S SHIP INFLEXIBLE, CAPTAIN JOHN A. FISHER.

Tonnage, 11,400; armor, 16 to 24 inches; men, 849; guns, four 81-ton, in two turrets.

line out of range of the forts, pouring their heavy shells into Fort Meks from Central Pass, and into Forts Aida and Pharos, which they succeeded in silencing. The Inflexible is one of the most powerful turret-ships afloat. The Téméraire is the only existing example of the barbette type, which is coming in favor with naval authorities. She ran aground in the beginning of the action, and was only released after several hours by the aid of two of the gunboats; but all the time her fire was particularly effective. The Invincible, the Monarch, and the Penelope constituted the inside squadron, attacking the forts at the western end of the bay from within the outer harbor. These are vessels of the old class. The Penelope, having the lightest draught of all, was able to work effectively at close range. The gunboats Condor and Cygnet could push up into closer quarters, and aided materially in the action.

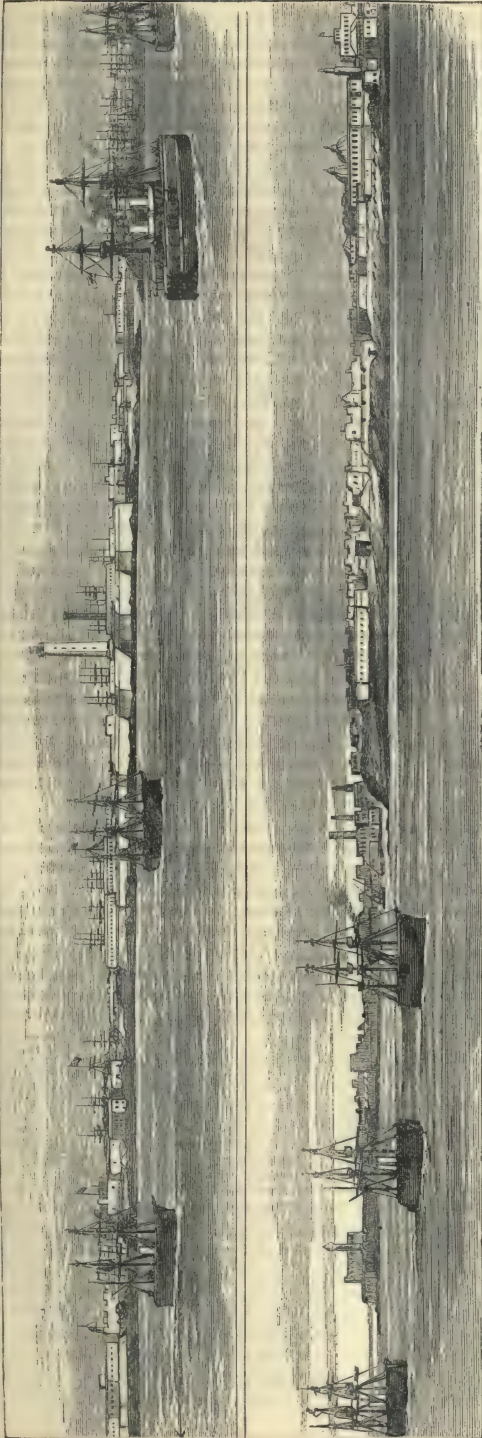
The plan of Admiral Seymour was to engage the enemy all along the line, and harass him with an incessant bombardment. The ships moved at first in oblique lines, so that the Egyptian gunners were unable to get their exact distance, as they had to constantly vary the range. The forts, on the other hand, presented a fixed target, into which the eight ironclads poured a ceaseless hail of shells weighing some 258, some 410, some 547, and those of the 81-ton guns, 1,704 pounds. The firing was very inaccurate; but enough of it was effective to knock the stone forts into ruins, kill whole squads

and a half hours. Most of the forts attacked were silenced. The fire from some of them was heavy and sustained. The discipline and fortitude displayed by the Egyptian cannoniers were admirable. Their fire was extremely accurate as regards direction, but in elevation they generally failed. The round shot which hit the vessels did little damage, while none of the conical shells struck the ships.

The bombardment would have been continued longer if the commander had not landed a force to disable Fort Meks. It landed 900 strong and found the fort abandoned. Its two 10-inch guns were blown up and the rest spiked. The fortifications were destroyed by the shot, and the barracks and houses around shattered to pieces by the shells. Ras-el-Tin Fort was in the same condition, the adjacent palace greatly damaged and partly burned, and the light-house nearly destroyed. Fort Pharos was silenced, its magazine blown up, and guns dismounted. Fort Marabout was badly battered but not destroyed. A gallant incident of the battle was the dash of the gunboat Condor, commanded by Commander Lord Charles Beresford, close under the guns of this fort, which was harassing the ships considerably, to silence them. The buildings of the city suffered much. Several shells from the Inflexible burst directly over the town, and shells from all the deep-draught vessels, which were obliged to engage the forts at distances of 3,000 or 4,000 yards, occasionally fell in the town. The Alexandria was struck twenty-five times, and had



Penelope. Inflexible. Téméraire.



Khedive's Palace.

Port and Earthworks.

Hospital.

Eunostos Point.

Superb.

Sultan.

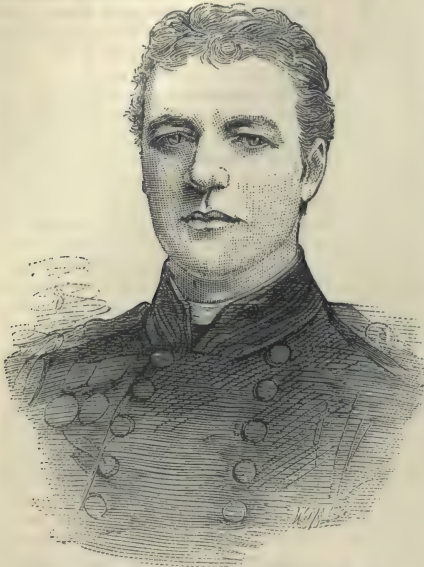
Pharos Castle.

Alexandria.

two guns disabled. The *Invincible* was pierced by six shots. The *Penelope* had a gun disabled. The casualties on the British side were only six killed and twenty-eight wounded. The loss of life on the Egyptian side was very great. It was only by killing all the gunners that most of the pieces on the earthworks were silenced.

The bombardment of Alexandria was an event of great technical importance, and of practical interest to the nations which have expended huge sums on monster ironclads. It proved that these floating fortresses are able to cope with shore-batteries, and will stand the fire longer. The conditions of the trial were, however, very favorable to the ships. The Egyptian gunnery was too defective to show the amount of damage which can be inflicted upon the ships. Their ammunition was not of the most suitable kind. The British ships, on the other hand, were favored with an exceptionally still sea, and their artillerists had complete charts of the bay, so that the elevations could be calculated at once, without the necessity of experimental cross-ranging. The engagement at Alexandria taught one important lesson regarding the defense against the heavy ordnance of modern ironclad frigates. It is, that earthworks afford an excellent protection. Shells from the 81-ton guns, exploding among sand-bags, inflicted no injury. They threw up great clouds of dust, and it seemed as though the whole structure was leveled; but when the air cleared the guns were seen to be in the same position. It was necessary to hit the guns themselves to silence these batteries. Masonry is useless against such guns; the strongest granite walls were shivered with a single shot. The next morning fire was opened upon Fort Aida and Castle Pharos. After a few shots a white flag was hoisted off Ras-el-Tin. Lieutenant Lambton proceeded in the *Bittern* to demand the surrender of Forts Ajami, Meks, and Marabout. He saw Toulba Pasha on board the Khedive's yacht *Mahroussa*, who stated his inability to conclude terms without consulting the Khedive and his ministers at Ramleh. When the time given for his answer had gone by, the British fired one shot, which was not returned. Another white flag was seen flying

that afternoon. The Egyptian troops during the day evacuated Alexandria, and retreated into the interior. Their silent withdrawal after opening negotiations was characterized by the English as an act of treachery.



LORD CHARLES BERESFORD, COMMANDER, R. N.

Most of the population had fled from Alexandria during the bombardment. When it was deserted by the troops, shocking scenes of pillage and destruction ensued. Some person in authority, probably Mahmoud Samy, gave the signal to plunder and fire the European quarter. The ragamuffins who abound in the Levantine cities reveled in the saturnalia of robbery and vengeance. Stragglers from the army set the example. Finely-built streets in the European quarter were burned to the ground. The richly-furnished shops were most of them gutted, and most of the merchandise was destroyed by the pillagers as soon as they reached the street. The conflagration lit the sky the night after Arabi's departure. Europeans who had remained in charge of the banks and offices barricaded the houses, and kept the mob off with their fire-arms. When the scenes of fury abated they dashed down to the shore in bands, and were taken on board the ships. Admiral Seymour telegraphed that the town had been given up to "Bedouins" to plunder, and in a second dispatch that it was "convicts," who had been set loose to loot the city. On the morning of the following day the English ventured to disembark and take possession of the deserted town. The admiral on the 13th landed parties of marines to stay the wild havoc. Lord Charles Beresford was given the direction of the police measures, assisted by Major Tulloch,

the chief of the landing party at Fort Meks. Commodore Nicholson, of the United States Navy, sent a detachment of marines, who stood guard at the American consulate, and assisted in maintaining order. The Russian, German, and Greek commanders followed the example, and landed small parties. The inhabitants soon flocked back to the city. Every Arab waved a white handkerchief as a signal of peace, or wore a red band in token of fidelity to the Khedive. When there was any evidence or appearance of their having joined in the looting, they were shot with little formality. The marines were particularly zealous in this hasty justice. By the 17th 5,800 soldiers and marines were ashore. The Tamar had arrived with nearly a thousand marines on board, and two regiments had been sent from Limasol, in Cyprus. The British Government were severely blamed, at home and abroad, for not having troops ready to land in time to save Alexandria from pillage and arson. Mr. Gladstone explained that they were precluded from landing an army by the protocol of sole action. The damage was taxed by the sufferers in their claims, presented before the commission of inquiry subsequently appointed by the Khedive, at a total of \$30,000,000.\*

The Khedive remained during the bombardment in the palace at Ramleh, with Dervish Pasha. A force of 300 men was sent with orders to murder the Khedive, but Arabi came and countermanded the order, leaving the soldiers as a guard. The English, as soon as they landed, sent a guard to Tefvik Pasha, who had come down to the Ras-el-Tin Palace. Mahmoud Baroudi, and all the ministers, except Arabi, presented themselves at the palace.

NEGOTIATIONS AT THE CONFERENCE.—In the diplomatic discussions between the joint protecting powers, England had the advantage of an untrammelled position, while France was fettered by difficulties on every side. England insisted upon intervention and the suppression of the national Government. This policy had been marked out by Gambetta, and the French Cabinet was in a situation where it could not reverse it, although Egyptian independence

\* The ancient capital of the Ptolemies remained down to the epoch of the Eastern Empire one of the largest and richest, and was also distinguished as one of the most turbulent cities in the world. After the Arab conquest it was eclipsed by the newly-founded Cairo, and steadily declined during the middle ages. It was entirely ruined by the Turkish conquest in 1517, and at the time of the French expedition in 1798 there was nothing but a cluster of Arab huts holding about 8,000 inhabitants. Mehemet Ali discerned the possibilities of the site, and revived its commercial greatness by clearing out the harbors and digging the Mahmoudieh Canal, which brings fresh water from the Rosetta branch of the Nile. Already prosperous as the sea-port for the overland commerce, the commercial capital of the Nile Delta underwent a prodigious expansion in wealth and magnificence when the American war brought on the cotton famine. The European quarter is in the eastern part of the city, near the sea. Around the Place Mehemet Ali, and in the streets leading out of it, were the consulates and other public buildings, huge blocks of offices, and magnificent emporiums. Sumptuous mansions lined the streets to the eastward in the direction of Ramleh. In this cool and delightful suburb on the sea-shore, four miles from the city, the English all resided, some of them in splendid villas.



found much sympathy in France, and would be more conducive to French interests than any form of intervention except an aggressive assertion of French preponderance, which would endanger the relations of the republic with Europe. England was shrewdly accommodating and yielding. She had been the first to propose a reference of the Egyptian difficulty to the powers. She expressed a willingness to agree to an intervention by the Porte, or to undertake a joint intervention with France. Any action must result in a stronger assertion of England's paramount interests and the sacrifice of the political preponderance of France, which had existed from the beginning of the century, and was strengthened by social influence and moral prestige far outweighing those of Great Britain. The intervention of Turkey as the mandatory of the powers was Freycinet's final proposition. England agreed to that, as she agreed to every positive proposition, although favoring most the interposition of the Sultan as sovereign lord. In order to safeguard French interests in Africa and make easier the acceptance of Turkish intervention in France, Freycinet imposed the condition that the expeditionary force should be commanded by French and English officers. After the bombardment the conference agreed upon the sending of a Turkish force to restore order in Egypt. They were to act under the direction of the Khedive, and to retire in three months, leaving all future arrangements to be decided upon by the powers. In this form the scheme was presented to the Porte in an identical note on July 15th. The Sultan could have no possible interest in lending himself as an instrument to enforce the will of England and France in Egypt. With nothing to gain, he would have sacrificed at one cast the fruits of his laborious efforts to restore the influence of the Caliph. Any hostile action against Arabi would have been as unpopular in Turkey as in Egypt. Arabi and his army were regarded as Moslem heroes. The softas and ulemas of Stamboul declared, with the pious doctors of Cairo, that Arabi would be bound by the Mohammedan law to disobey and resist the Caliph himself if restrained in his efforts to redeem the territory of Islam from the yoke of unbelievers. The Porte temporized as usual. It did not reject the principle of intervention, but objected to the conditions, which, between the jealousy of France and the ambitious designs of England, were so framed as to prevent the peaceful solution of the Egyptian difficulty by a simple demonstration of the authority of the Sultan, a solution which would have been as welcome to Egypt as to Europe. Great Britain was preparing as secretly as possible but with all possible speed for war at the time when she signed the identical note. Freycinet, although he had abandoned the aggressive policy of Gambetta, and was desirous of having the Egyptian question settled by the European concert, was prepared to co-operate

with England to the extent necessary to maintain France's position as joint protecting power. The deputies first granted the ministry a credit of 7,000,000 francs. On the 18th of July the announcement of the calling out of the reserves was made in the British Parliament. On the 24th the Prime Minister asked for a vote of credit, which he placed at the absurdly small sum of £2,300,000, to be raised by adding 1½d. to the income-tax. The dispatch of an Indian contingent had been announced on the 18th. The expenses of the Indian force it was proposed should be borne by the Indian Exchequer. On the same day that the military credit was voted by the British Commons the French minister applied for an additional vote. It was stated that French action would be confined to the protection of the Suez Canal, since the powers had refused to sanction an Anglo-French military intervention. The French Chamber, appealed to on the one hand by Gambetta, who vigorously attacked the Government for their tame attitude, and on the other by the ministry with a fine-drawn and scarcely intelligible scheme for keeping up the Anglo-French alliance without leaving the European concert, concluded that it was safer and more dignified to assume no share of the responsibility of breaking the concert and coercing the Egyptians. Freycinet resigned upon the rejection of the supplementary credit, and Duclerc formed a Cabinet with the policy of passivity and expectance. When Gambetta first initiated the plan of dual intervention, a counter-alliance of the Eastern powers—Russia, Austria, Germany, and Italy—was in the process of formation. Now that England proposed to take possession of Egypt alone, there was intense opposition in St. Petersburg, and there were murmurs at Rome and Vienna, but no combined action was possible. Russia had no objections to the annexation even of Egypt by Great Britain, but it should be at the price, as was proposed by the Emperor Nicholas, of the acquisition of the Bosphorus and Constantinople by Russia. Prince Bismarck held the key to the situation, through his influence over Austria and Italy. It was, perhaps, the frustration of this traditional scheme for Russian aggrandizement which now actuated him to turn a deaf ear to the frantic protests of his friend the Sultan.

The Khedive had ordered the cessation of war preparations, and had summoned Arabi before him in vain; but it was some time after the English obtained charge of the person of the Khedive before they could induce him to proclaim Arabi a rebel, and discharge him from the post of Minister of War. This was inevitable, since Arabi, in order to rouse the people to resistance, and carry out the rôle of defender of the sacred soil of Islam against the infidel usurpers, was obliged to denounce Tefvik as the slave of the Giaours, and assume the character of dictator. The Notables refused, however, to declare Tefvik a traitor. The



Khedive's proclamation appeared on the same day with one from Arabi Pasha, characterizing Tevfik as a traitor to his country and his religion. Furnished with this proclamation of the Khedive, the British ambassador to the Porte, Lord Dufferin, announced to the conference the dispatch of a British expedition to Egypt, explaining that the Alexandrian forts were destroyed as a measure of defense, and that the expedition was necessitated by *force majeure*, and was not to be construed as "isolated action" or a breach of the protocol *de désintéressement*, but was solely intended to restore peace and order, to secure the free navigation of the Suez Canal, and to re-establish the authority of the Khedive. The Porte was the only Cabinet which was deeply interested in keeping the English out of Egypt. The proposition of the conference, that the Sultan should forcibly suppress the movement which he had encouraged, and take up arms against the defenders of Dar-ul-Islam, a Moslem land, as the mandatory of the powers, was an impossible course. He sought to delay the proceedings as long as possible, and looked in vain for a friendly combination in Europe to prevent the British occupation of Egypt. The Russian ambassador, M. Onou, was instructed by his government not to attend the conference, which England by her isolated action had set at naught; but in a few days he returned to the meetings. The Porte replied to the invitation to subdue the Egyptian rebellion with Turkish forces by declaring a willingness to enter the conference. Said and Assam Pashas appeared at the conference on July 26th. They announced that the Sultan did not reject the principle of a military occupation, but that the conditions contained in the identical note would have to be reconsidered. The announcement of the British expedition was now met with a declaration that the Sultan would send troops to Alexandria, in accordance with the terms of the identical note. The Conference, after accord was re-established, only sat as a matter of form, remaining passive and neutral in the discussion which ensued between Turkey and England. Great Britain pretended to accept Turkish co-operation, but demanded as a preliminary that the Sultan should proclaim Arabi a rebel. The ulemas of Stamboul, as well as of the Azhar Mosque at Cairo, protested that Arabi could not be regarded as a rebel when protecting a Mussulman country against the aggression of a Christian power. The highest authorities in Mohammedan law, the professors at Cairo, declared that it would cost the Sultan his caliphate if he took part with the infidels. The Sultan sent a force of 3,000 men to Suda Bay, ready to land in Egypt at a moment's notice. A military convention was submitted to the Porte by Earl Dufferin. The English desired the proclamation declaring the Egyptian army to be rebels, and would have liked to have a Turkish force posted in Egypt for the moral effect, but insisted on having it placed under

their control. The conditions of the military convention were as follow:

1. That the Turkish contingent should be restricted to 5,000 men.
2. That it should land at Aboukir, Damietta, or Rosetta.
3. That its movements and operations should be regulated by a previous agreement between the English and Turkish commanders.
4. That a Turkish military commissioner should be attached to the English headquarters and an English commissioner to the Turkish headquarters; and,
5. That the English and Turkish troops should evacuate Egypt simultaneously.

Said Pasha proposed modifications which would place Turkey in an independent and co-ordinate position. Lord Dufferin refused to submit the question to the conference. He resorted to Turkish evasion and procrastination to prevent a settlement, while the military operations were being pushed forward. At last, when the English had seized Port Said and were ready to strike the decisive blow, he obtained the desired proclamation from the Sultan in return for permission to send a Turkish force to Port Said. He then quibbled about the form of the proclamation, and, after accepting that, about the terms of the convention, which were, he said, that the Turkish troops might "proceed to" Port Said, not that they might "land" there, until Arabi's force was crushed. The British ambassador then announced that a military convention was no longer necessary, and broke off the negotiations.

**BRITISH INTERESTS IN EGYPT.**—The British interests in the Suez Canal as the route of military communication with India and Australia were advanced as the all-sufficient ground for the Egyptian expedition. The neutrality of the canal is guaranteed by Europe. Its safety was not at all imperiled by the political changes in Egypt, whatever might have been their outcome. Except as being nominally within the dominions of the Khedive, as being touched by a railroad from Cairo at two points, and as deriving its supplies of fresh water from the interior, it was entirely outside of the influence of events in Egypt. The main object of the war with the British Government was doubtlessly to alter the *status quo* of the canal by a definite assertion of the paramount interests of England before Europe, and the assumption of a priority and predominance in Egypt which will prevent any hostile power from ever using its government to politically harass England or belligerently menacing the connection with India from Egyptian soil. Another political reason given was to maintain Tevfik Pasha on the throne on which England and France had placed him. There were various important pecuniary and commercial interests which, though seen to have been operative in the train of events through which Great Britain "drifted into the war," were not acknowledged as motives, except two or three of them in a secondary degree. The interest of the British Government in the solvency and good faith of Egypt was involved to the extent of the 5 per



cent annual interest on the Khedive's 176,602 shares, two fifths of the original capital transferred to the British Government for the £4,000,000 in cash, which interest, amounting to £198,829 a year, is paid in lieu of the profits up to 1894, to which date the dividends were already alienated by the Khedive to the Suez Canal Company.

Of the mercantile interests threatened or said to be threatened by the Egyptian imbroglio, the most important and the most deserving of being defended were those of British commerce in the Suez Canal. Of the 17,207 ships with an aggregate tonnage of 33,244,452 tons which passed the canal from the time it was opened in December, 1869, till the end of 1881, 12,960, with a total capacity of 25,779,664 tons, were British. The French came next in the amount of tonnage, but it was only about one twelfth as much as the British. The aggregate amount of tolls collected in that period was about \$64,370,000, averaging \$1.90 a ton and \$3,660 a ship, the average tonnage of the ships passing through being 1,932 tons. In the year ending in April, 1882, of the 3,006 vessels, aggregating 4,257,000 tons, which passed through the canal, 2,484, of 3,512,000 tons, were British. About one fourth of the total capital invested in British shipping is engaged in the Suez Canal traffic.

**THE CAMPAIGN.**—The preparations for the war of occupation were entirely secret up to the time of the bombardment of Alexandria. Then the British forces in the Mediterranean

General Sir Archibald Alison, was collected gradually from the Mediterranean stations, which held Alexandria while the first reserves of the English army were being mobilized. The army reform in England is not yet complete, and although discipline and *morale* have deteriorated through the short-service system, mobilization is still sluggish. While a thoroughly appointed corps was getting ready in England and a body of Indian troops was being equipped to meet it in Egypt, the garrison at Alexandria made frequent reconnaissances, but did not venture to engage Arabi, although they were strong enough to meet the force which he then had. A sharp skirmish occurred on the 5th of August. The Egyptians intrenched themselves at Kafr-Dowar and strengthened the fortifications at Aboukir. New recruits flocked to Arabi's camp by thousands. Before the arrival of the English expedition he organized a military government which covered the whole country, had every point guarded, and animated the mild population of the Delta with the spirit of war. It was over a month after the bombardment before the English army arrived at Alexandria.

Arabi erected strong fortifications at Kafr-Dowar, a triple line of formidable earthworks. With the railroads of the Delta at his command he was able to concentrate at any point. All along the line from Meks to Tel-el-Kebir his garrisons confronted the invaders from behind powerful intrenchments. He had altogether about 70,000 men, with one hundred and fifty cannon. They were aided by the Bedouins, who might have proved formidable irregulars, and did harass the English wherever they had an opportunity. The Egyptian army was armed with Remington rifles and Krupp guns of all calibers. They had an abundance of ammunition, their commissariat was amply supplied, their transport was unexceptionable. The bulk of the forces were at first at Kafr-Dowar; and then, when the British established themselves on the Suez Canal, they were massed at Tel-el-Kebir. There were besides 3,000 men at Meks, 11,000 in the forts of Aboukir, 8,000 under Abdelal in Damietta and the neighboring forts, and a garrison of 11,000 at Cairo.

The expeditionary force sent from England consisted of 1,010 officers and 21,200 men, with 54 field-guns, 5,600 horses, and 500 pack-animals. The English authorities had sent orders to America and other countries to have mules ready to send on, but were precluded from buying them before Parliament granted supplies for the war. Their transport service was therefore crippled throughout the campaign. Re-enforcements were sent on afterward of 10,800 men and 280 officers. The Indian auxiliaries numbered 170 officers and 7,100 men. The British commander-in-chief, Sir Garnet Wolseley, arrived at Alexandria on August 15th. He ordered the troops who had landed to re-embark, and on the 19th the whole force



MAJOR-GENERAL SIR ARCHIBALD ALISON.

[He commanded a division. He was born in 1826, and served in the Crimea and in India, losing an arm at the relief of Lucknow. He was chief of the intelligence department at the War Office when he left for Egypt.]

began to move forward, and preparations went on more actively and openly in England and India. A force of about 6,000 men, under

sailed away in five ironclads and sixteen transport-ships.

General Wolseley gave out that he meant to force the enemy's stronghold at Aboukir, and from there assail his right at Kafr-Dowar. It would greatly simplify the difficulties of the campaign if the British should occupy a point on the Suez Canal, and advance from there upon Cairo. But they were supposed to be bound to respect the neutrality of the canal. They were especially bound, since they had given solemn assurances to De Lesseps that they would not extend their operations to the canal, and on the strength of these promises Arabi had been prevailed upon to spare the canal, when he would otherwise have closed

ter by damming the Mahmoudieh Canal. The lowering of the water in the canal forced Sir Garnet to try the mettle of the enemy, although he had not sufficient force to take the field yet. On the 24th of August he advanced to Ramses with the Household Cavalry, a detachment of mounted infantry, two field-guns and two Gatlings, and one thousand infantry, all under the immediate command of General Willis. The Household Cavalry, by a dashing charge, gained possession of the dam between Magfar and Mahuta. The position of the small force became critical when re-enforcements, pouring in from Tel-el-Kebir, increased the Egyptian army to about ten thousand men, with twelve guns. Sir Garnet, as he reported boastfully in his



the passage to prevent the British from making it their base. Accordingly, when the fleet left Alexandria and steamed into Aboukir Bay, neither the Egyptians nor any one else suspected any deception until, after this feint upon Fort Aboukir, Port Said and Ismailia were occupied, and the whole canal was in the hands of the British. The English troops and Sir Herbert McPherson's Indian contingent united at Ismailia.

The Egyptians cut off the supply of fresh wa-

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who had flanked them by a wide *détour*, attacked the retreating troops and captured five Krupp guns, seventy railroad-cars, with large quantities of war material, taking Mahsameh Railroad Station, and cutting off their line of communications.

The English had landed in Egypt twenty-four thousand troops altogether, including the Indian force which debarked at Ismailia. One



LIEUTENANT-GENERAL WILLIS.

[He commanded the First Division. He was born in 1832, and served during a part of the Crimean war.]

brigade was left at Alexandria, while the others joined the Indian contingent on the canal. Sir Garnet Wolseley's situation in the desert before Tel-el-Kebir was gloomy. He was not able to advance upon the objective point for lack of transport facilities. Kassassin was seized on the 25th of August and held by General Graham, but the transports were twenty miles behind. The blazing sun, the foul and tepid water of the fresh-water canal, and the malarial vapors caused prostration, dysentery, and fever. In a week four hundred men were sent home invalided. The horses of the Indian auxiliaries were disabled with glanders. While the army was waiting and suffering, mules were being purchased in the United States. Mules which were on the way to the seat of operations were stopped by an embargo of the Sultan of Turkey.

The deluded Arabi, thoroughly alarmed at the change in the situation which brought an overwhelming British army close to Zagazig, the key of the Delta railway system, and within striking distance of Cairo, determined to strike quickly, as delay would only lessen his chances. He took command of the Tel-el-Kebir force in person, and massed his troops there as rapidly as possible. On the 28th of August he made an attack upon General Graham, who, with a mixed body of about two

thousand men, had advanced to occupy the Kassassin lock on the fresh-water canal. The Egyptians brought up their forces under cover of an artillery-fire, and in the afternoon advanced, under the immediate command of Arabi Pasha, with the intention of turning Graham's right flank. The English had, fortunately for them, thrown up field-works. They posted their artillery in a position to command the whole front of the line, and kept up such a steady fire that the Egyptians wavered after marching up very bravely, and refused to make the final dash. The English general seized the favorable opportunity and ordered a general advance. The horse-artillery took a position at close range. General Drury Lowe's dragoons, when the enemy were retreating in good order, rushed upon the Egyptian artillery and seized the guns, which they were unable to bring away, and then sabbared their way through and through the infantry, turning the retreat into a complete rout.

Sir Garnet Wolseley had the forces on the spot to cope with the Egyptian army, but felt obliged to delay his advance while Arabi was strengthening his defenses, and his own troops and horses were suffering from the torrid climate, because the departments were defective. While, during the next two weeks, he was organizing a commissariat and transport service, and collecting railway material, preparatory to commencing operations in the interior, Arabi made one more attempt to force the advanced position of the British at Kassassin, and crush



MAJOR-GENERAL G. GRAHAM.

[He commanded the Second Brigade. He served with distinction in the Crimea, and received several wounds in that war and in the Chinese war. He entered the army in 1850, and attained the rank of Major-General in 1880.]

General Graham's command before the movement on Tel-el-Kebir, which he knew would not be put off much longer. At dawn on the

9th of September he led up a force consisting of eighteen battalions of his choicest infantry, a considerable body of cavalry, and thirty guns. He occupied a rising ground commanding the British right, but his guns were badly served, and were silenced by the accurate aim of the English cannoners. The cavalry were checked and rendered useless by the British cavalry. The infantry advanced boldly and steadily to within eight hundred yards of the English line, when a flank movement of Drury Lowe's cavalry division caused them to hesitate, and the destructive infantry-fire of the English brought them to a stop.

On the night of the 12th, the British camp broke up and the baggage was removed to the railway. A force of about 14,000 of all arms left Kassassin and marched in the dark and in silence toward Tel-el-Kebir. The horse-artillery and cavalry kept well to the right, so that they might in the engagement sweep around the left flank of the enemy and gain his rear in order to cut off retreat. The army halted before dawn within a thousand yards of the fortifications without having encountered a single vedette. The battle-line was formed in a semi-circle, threatening the front and both flanks of the enemy. They then marched upon the intrenchments. The Highland brigade on the left was ordered to carry the first line of intrenchments with the bayonet before firing. When eight hundred yards away they received a volley of musketry, the first sign of life within the fortifications, upon which they rushed forward, cleared the wall, and bayoneted the Egyptians. They encountered a severer fire from the next line of intrenchments, which they returned for a couple of minutes, and then ran forward and carried the works. From between the redoubts they poured a flanking fire into the enemy which withered their ranks and paralyzed their action. The intrenchments on the right were forced with more difficulty by the Irish regiments of Graham's brigade. The outer work was in like manner won with the bayonet. The Egyptians stood their ground and fought well for a time, but at the repeated onsets of relays of fresh troops threw down their arms and fled in confusion. The artillery broke up the fleeing ranks, and the cavalry followed them up and completed their disorder. The British soldiery were merciless in their use of the victory, slaughtering the wounded in the trenches and the unarmed fugitives with frightful barbarity.

The defeat of the Egyptians was very complete. The army was scattered, thousands were killed and about 3,000 made prisoners. The guns and camp equipments and vast stores of forage and provisions fell into the hands of the English. The English general acted promptly so as not to give Arabi any time to re-collect his forces. In a few hours Zagazig, where large quantities of locomotives and rolling stock were found, was occupied by Macpherson, and Belbeis by Lowe, and on the 15th

both generals entered Cairo. Here Arabi and several of his principal officers and associates were made prisoners.

After Arabi's formidable power was thus crushed at a single blow, many voices in England called upon the Government to secure the fruits of victory notwithstanding ministerial pledges and protestations of "clean hands." If there were powers who would not begrudge some modification of the *status quo ante* by the right of conquest, Russia, who had been held by Great Britain under threats of war to the strictest interpretation of the Treaty of Paris, was not one. M. de Giers promptly reminded the English Cabinet of the terms of Lord Salisbury's circular, and wrote: "The *status quo*, territorial and political, must be maintained in Egypt as it has been established by treaties; and if, as a result of the late events, changes are recognized as necessary, Europe alone is competent to decree and enforce them. The conference has never been contested by the English Government." The position of the Control was according to the promises of England stronger than ever, since the war had been undertaken to establish the rights which it claimed over the Government of Egypt. France protested when the British Government proposed to abolish the Control and rejected the substitute proffered of a debt commission. The Controllers sat in the councils of the ministers at first the same as before. After a while the English Controller absented himself, and was at last recalled. The Control was thus practically abolished. The actual administration fell again into the hands of the old official class, the Turks and Circassians, and exhibited the old vices of bribery and extortion, which were remedied under the Control.

The reorganization of the military establishment of Egypt was claimed as the right of the victors, and it was understood that the English should settle upon a scheme for a gendarmerie to suit themselves, and which they could keep under their influence. Baker Pasha, a British officer, who was serving the Sultan as chief of the engineer department, was summoned to organize the new army. Although the Sultan refused to give him his discharge, he came and matured schemes for the replacement of the national army with foreign mercenaries.

The Khedive called to himself a ministry, of which Sherif Pasha was chief. He took the portfolio of Minister for Foreign Affairs; Riaz Pasha that of Minister of the Interior; Omar Pasha Lufti became Minister of War and Marine; Ali-Mubarek Pasha, Minister of Public Works; Haidar Pasha, Minister of Finance; Khairy Pasha, Minister of Public Instruction; Fakhri Pasha, Minister of Justice; Zeki Pasha, Minister of Wakfs; Ismail Eyoub Pasha, Minister for the Soodan. The first act of the Government, on the advice of the Controllers, was to create an international commission to adjudicate upon the claims of foreigners for compensation on account of losses sustained



from the insurrection. The claims were appraised at \$10,000,000 for property plundered and destroyed at Alexandria, \$7,500,000 for buildings burned in the city, and \$5,000,000 for losses in other localities.

Arabi Pasha and the other members of the provisional government were brought to trial before a military tribunal. Arabi was allowed English counsel and the English authorities interested themselves to save him from death, which is usually the fate of the leaders of unsuccessful political movements within the Turkish Empire, after it was proved that he had no complicity in the June riots nor in the sacking of Alexandria. Moreover, it would have been inconvenient to the British Government to publish the correspondence which was discovered, showing the connection of the Sultan with the Egyptian revolution. Arabi, on the advice of his counsel, pleaded guilty to the charge of "rebellion." Sentence of death was pronounced against him and his colleagues, which, according to a previous understanding, was commuted by the Khedive to perpetual banishment. The British colony of Ceylon was designated as the place of exile, whither Arabi, Mahmoud Sahmi, and Toulba were conveyed and maintained in safe retirement.

**THE FALSE PROPHET.**—While the Egyptian revolution was being suppressed with British arms, another revolution was enacted in the remote provinces of the Soodan. The inhabitants of these provinces have suffered greatly under Egyptian rule from the oppressive taxes of the Government, and still more from the corrupt officials and farmers of the taxes. They are negroes, with an occasional mingling of Arab blood. These dark races are fanatical Mohammedans. They make brave and hardy soldiers, and have furnished the only good material for the Egyptian army. A man named Mohammed Achmet, a boat-builder by trade, born in the region of Dongola, on the western bank of the Nile, proclaimed himself the expected Mehdi, or successor to the Great Prophet and deliverer of the people. He soon obtained a large following among these superstitious people who had felt oppression. A small force of soldiers attempted to dislodge him from the island of Abbas, 200 miles south of Khartoom, but were slain to the last man before they fired a shot. The pretended prophet withdrew after this exploit to a safe position in a wild mountain about ninety miles northwest of the penal colony and military station of Fashoda. The Baggara Arabs, the former slave-hunters of the White Nile, joined his standard in great numbers. A new Governor of Fashoda attempted to distinguish himself by leading an expedition against the rebels. He and all but 70 of his 800 soldiers were killed. In June Giegler Pasha, who succeeded Raouf Pasha as governor-general, sent the largest force that he could muster, 3,500 Egyptian regulars, against the Mehdi. They met him at the head of 7,000 men near Kordofan.

Although the rebels were mostly armed with spears, the Egyptian troops could not stand their onset. They threw down their arms and fled, the greater part of the force was destroyed, and the victorious Mohammed Achmet marched upon Sennaar. For several months he was sole master of the Soodan. After the British conquest an expedition was organized and sent to the White Nile to put down the pretended Messiah. The strong places on the eastern side of the river were recovered. The Mehdi suffered a severe repulse with losses reported to be over 15,000, when attempting to besiege Obeyad, the capital of Kordofan. He then laid siege to the town, but afterward withdrew to Birkeh, where, in December, he was reorganizing his troops and awaiting re-enforcements from Bahr-el-Gazal and Darfour.

**EGYPTOLOGICAL AND ASSYRIOLOGICAL RESEARCH.** Our knowledge of remote antiquity and of the primitive condition of the historical nations has been vastly enlarged, and is still being enriched at a rapid rate, by the examination of the ruins of the ancient cities and monuments of Egypt and the Mesopotamian empires—resources which were wholly unknown to our ancestors, and the value of which had hardly begun to receive adequate appreciation a generation ago. These investigations have received a powerful impulse within the last two or three years by the publication of discoveries of great importance which have been made in Egypt, Assyria, Babylonia, and Syria, and are now prosecuted with more vigor and intelligence than ever before. The work was hardly interrupted by the war in Egypt, which, coming in the idle season, when active out-of-door operations were not practicable, caused at most a temporary apprehension that the stores of relics and records accumulated at Boolak might be in danger of pillage by the insurgents. Happily, these fears were not justified; and since the war was closed, the museum at Boolak has been renovated, enlarged, and rearranged, and now has double the capacity it had before, and a vastly increased value. Work in the cabinet has in the mean time gone on without intermission; and excavations have been begun again, on a liberal and systematic scale, from which further discoveries of value may be anticipated. Before describing the results of the latest investigations in the fields of prehistoric research, it will be proper to review the conclusions which had already been reached respecting the periods and conditions of the most ancient empires.

**EGYPTIAN CHRONOLOGY.**—The results of the investigations in Egyptian antiquities are such as to establish, according to the most moderate calculation, the existence of the Egyptian monarchy 1,500 years at the least, but probably more than 2,000 years before the birth of Moses, which is placed at 1,571 years before the Christian era. But 1,500 years before Moses, who was 1,571 years before Christ, who was 1,882



years before the present time, takes us back 4,952 years, or about 5,000 years ago.

The materials for these investigations consist of the inscriptions on monuments, in temples and tombs, and the writings on papyrus. The immense collection of these inscriptions or texts which has been made is only a fragment of those which exist. To copy those alone in the temple of Denderah, of which every square foot of the walls is covered with pictures or texts, would be the work of years. The inscriptions of a single tomb are often as comparatively abundant as those at Denderah. Nevertheless, the work of destruction has been going on for ages. Abd-el-Latif, a learned Arabian writer of the middle ages, tells, in his description of Egypt, that the ruins of Memphis in his time extended half a day's journey in every direction. But of Memphis there is at present hardly a trace left. And other great cities known to ancient travelers have disappeared with their monuments. Mummy-cases and coffins, with most interesting inscriptions, have for centuries been used for fuel, and innumerable manuscripts have suffered the same fate.

**NATURE OF THE MATERIALS.**—Most of the documents, according to the views of M. Renouf,\* here presented very fully, which have come down to us, are of a religious character. The principal reason of which is, that all the ancient monuments of Egypt have perished except some which were necessarily of a religious nature—the temples and the tombs. The palaces of kings and nobles have utterly disappeared.

It should be stated that the system of reckoning periods of the Egyptians was not by centuries, or eras and dates, but by reigns and dynasties; thus the Exodus described in the Pentateuch took place in the fourth reign of the nineteenth dynasty, which was about fifteen hundred years before the Christian era; and in going back from the Roman conquest of Egypt to the first years of the seventh century before the Christian era, which is the advent of the twenty-sixth dynasty, the chronology is exact. But the principal defects in estimating the periods are various. The duration of a reign, or of a dynasty, is sometimes very far from being known; they may also have been local or simultaneous, and until all these points are cleared up a complete Egyptian chronology is impossible.

But the nature of the undisputed evidence upon which relative dates are assigned to the various periods of Egyptian civilization, and which imperatively demand that a very early date indeed should be assigned to the origin of that civilization, should be stated. There is not a single monument known which in its bearings upon chronology is liable to the charge of numerical exaggeration. They never speak of

contemporary events. Dates are given by the year of the reigning king. This is never so high as to justify a doubt. The manifest defect of such inscriptions for chronological purposes is, that the last monumental year, which happens to be preserved to us, of a king, is not necessarily the last of his reign. An error of several years is possible in each reign when there is no direct evidence to the contrary. But the error is not on the side of exaggerated numbers. Still more important than the monuments which mention the year of a king, are those in which two or more sovereigns of the same period are mentioned, especially if their succession or other precise data are given. Such is the treaty made in the twenty-first year of his reign between Rameses II and the King of the Cheta, wherein Rameses II calls himself the son of Seti I, who in turn is called the son of Rameses I. There is a very large number of inscriptions belonging to personages who have been born in one reign and died in another, or who have served several kings in succession. And the inscriptions of the same period naturally confirm one another, or supply details which are missing.

**SERIES OF INSCRIPTIONS.**—The most remarkable series of inscriptions which have been utilized for chronological purposes consists of those relating to the Apis bulls, the wonderful tombs of which were discovered by M. Mariette. One of these sacred animals was born in the twenty-eighth year of King Sheshonk III, lived twenty years, and died in the second year of Pamaï. Another Apis was born in the twenty-sixth year of Taharqa, and died in the twentieth year of Psammitechus I. A hundred and sixty-eight tablets in honor of this one Apis have been found, of which fifty-three are dated. Many other like instances could be mentioned. Documents of this kind bring us down past the time of Cambyse, and even into the Ptolemaic period; that is, into a period of well-ascertained chronology. By means of these inscriptions alone it is possible to go back from Cambyse to the first year of Taharqa, about seven hundred years before Christ, the limit of possible error being two or three years at the utmost. With Taharqa—the Tirhaka of Scripture, who was the last king of the twenty-fifth dynasty—begins the latest period of the history of the Pharaohs.

The first kind of monuments herein described is useful, as furnishing the highest attainable monumental year of a reign; the second kind enables us, besides, to determine the order of succession of reigns. Both these kinds of monuments are contemporaneous with the persons and events mentioned upon them. But besides these there are monuments giving long lists of sovereigns, all of whom can not have been contemporaneous. Such are the famous tablets of Abydos, that of Saqâra, the chamber of Karnak, and some others. In the chamber of Karnak, Thothmes III is represented as making an offering to sixty-one of

\* "The Origin and Growth of Religion, as illustrated by the Religion of Ancient Egypt." By P. Le Page Renouf. (Hibbert Lectures for 1879.)



his royal predecessors, whose names are given. At Abydos, Seti I, together with his son Rameses, then heir-apparent, offers incense to no less than seventy-six kings. It will be remembered that the Israelites in bondage are said to have been employed in building the treasure cities, as the Hebrew *meschenoth* is commonly translated, or rather sanctuaries, of Pithom and Rameses. It may be considered\* absolutely certain that no place in Egypt ever had the name of Rameses till the appearance of the celebrated hero of that name, who is actually represented on this monument as the son and heir-apparent of Seti I; neither will any instance or occurrence of the name ever be found, it is believed, more ancient than that of Rameses I, the grandfather of the great conqueror. Now, if this tablet of Abydos is correct, seventy-six kings—that is, very many more kings than can be counted in English history—must have reigned over Egypt before the first books of the Bible were written. But if we go back in English history to Ethelred II, in 976, we shall find that not more than forty-four sovereigns have reigned during a thousand years, and the average length of an Egyptian king's reign can not be shown to be shorter than that of an English sovereign.

TABLET OF ABYDOS.—But are the names on the tablet of Abydos those of real personages or of imaginary ones? There is but one way of settling this question, and that is by looking out for evidence which will confirm or contradict these royal lists. As far as the test of verification has been applied to these lists, there is no reason whatever for distrusting them. Instead of admitting the names of sovereigns who have never lived, they have, for certain reasons, omitted the names of many the existence of whom is quite certain. The intention of the tablets was not historical or chronological, but simply devotional, and the selection and arrangement of names consequently vary, though the most considerable names are the same in all. M. de Rouge has carefully studied all the monuments which belong to the first six dynasties.† The earliest monuments that can be found belong to King Senefru, the twentieth on the list of Abydos; and from this king till the thirty-eighth on the list the evidence is complete, and the order of succession thoroughly established by independent inscriptions contemporaneous with the sovereigns of whom they speak. The same truth may be asserted of the twelfth dynasty, which in the tablet of Abydos is represented by numbers 59 to 65. The number of monuments accurately dated belonging to this period is very considerable. They are all perfectly consistent with one another, and leave no doubt as to the length of each reign, and of the whole dynasty.

But it is important to notice the omissions of this tablet. The most beautiful monuments

of the eighteenth dynasty were constructed by the powerful queen Hatasu, sometimes called Hashop, daughter of Thothmes I, who associated her with him. She reigned for some years, either alone or in conjunction with her brothers, Thothmes II and III, successively; but her name and memory were persecuted by the latter, who resented her dominion over him during his minority. Her name does not appear in the tablet of Abydos. There is also an interval between the reigns of Amenhotep III and Hor-em-heb, which chronologically is filled up by the period of the sun-disk worshippers. The former was followed by a king, the fourth of the same name, who dropped it when he assumed that of Chut-en-Aten, as the founder of a new religion, which had a short-lived success. His attempts at reformation led to his exclusion from the lists of the legitimate kings. There is monumental evidence of one or two reigns of short duration before that of Hor-em-heb. The omission of the heretical sovereigns is easily accounted for. But no satisfactory explanation has yet been given of the omission of a large number of names between the end of the twelfth and the beginning of the eighteenth dynasty. The immediate passage on the tablet from one of these dynasties to the other can not mean that the king numbered 65 was followed by the king numbered 66, who is Aahmes I. King Sekenen-Ra was his predecessor, and there were even three kings of that name, and their tombs have been found at Thebes. The tablet of Ameniseub, in the Louvre, belongs to the reign of a king anterior to the eighteenth dynasty, but later than the twelfth. The interval between these dynasties must have been very considerable. The time immediately preceding the eighteenth dynasty was the period of the foreign domination, generally known as that of the Hyksos, or Shepherd Kings. But it is impossible to ascertain from Egyptian records when this period began, and how long it lasted. The 511 years ascribed to it by Manetho, as quoted by Josephus, must remain subject to future verification. The only evidence from Egyptian sources is a monument of Rameses II, dated from the four hundredth year of one of these kings of foreign origin. But a considerable number of native kings must have reigned between the last king of the twelfth dynasty and the beginning of the foreign invasion. Perhaps the most interesting monument of this period is the colossal statue of the king Semench-ka-Ra (the eighteenth king of the thirteenth dynasty, according to the royal Turin papyrus), on the right shoulder of which one of the foreign kings has had his name engraved in hieroglyphic characters. Of the kings of the eleventh dynasty only two, numbers 57 and 58, appear on the tablet of Abydos. Very interesting inscriptions belonging to their reigns are still extant, but other kings of the same names are known not only by inscriptions, but by their coffins. Of one of them,

\* Le Page Renouf on the religion of ancient Egypt.

† "Recherches sur les monuments qu'on peut attribuer aux six premières dynasties de Manethon," Paris, 1866.



Mentuhotep III, dates have been found as high as his forty-third year. Evidence like this proves that there is no exaggeration in the list of Abydos, which does not aim to present a complete list of kings, but only mentions those for whom Seti I had a special devotion. The disappearance of Memphis and other great cities is sufficient to account for the absence of monumental evidence for some of the reigns. But a want of space will not permit us to consider further the nature of the evidence.

**SPLENDOR OF THE ORIGINAL MONUMENTS.**—No correct ideas can be formed at the present time of the original splendor of the great pyramids. "The smooth casing of part of the top of the second pyramid," says Dean Stanley, "and the magnificent granite blocks which form the lower stages of the third, serve to show what they must have been all from top to bottom; the first and second, brilliant white or yellow limestone, smooth from top to bot-

tom, instead of those rude, disjointed masses which their stripped sides now present; the third all glowing with the red granite from the first cataract. As it is, they have the barbarous look of Stonehenge; but then they must have shone with the polish of an age already rich with civilization, and that the more remarkable, when it is remembered that these granite blocks which furnish the outside of the third, and inside of the first, must have come all the way from the first cataract. It also seems, from Herodotus and others, that these smooth outsides were covered with sculptures."\*



DECAY OF FIVE THOUSAND YEARS ON THE GREAT PYRAMID.

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**WHAT IS THE AMOUNT OF THE TESTIMONY?**—The aggregate testimony of the Egyptian monuments, interpreted by M. de Rouge in 1865, warrants the following summary of all we

The eighteenth dynasty is rich in monuments of every kind—historical and religious, literary and artistic. The same is true of the succeeding dynasty down to the time in which Moses probably lived. That period comprises the golden age of the later architecture and of Egyptian literature. A little poem, almost contemporary with the birth of the prophet, and of which there are three copies, can be put by the side of one of the most beautiful chants of the *Iliad*; even then a series of magnificent specimens of religious lyric poetry had commenced. The period of the domination of the Hyksos, during which the national kings were banished to the south, in a humble situation, retains, in the documents of Egypt, scarcely anything that is edifying, and even the thirteenth dynasty can be only most imperfectly restored. But, on going back to the twelfth\* dynasty, such an abundance of contemporary texts are found that the history and duration of the dynasty, which was a little more than two hundred years, can be reconstructed with very great precision. Then comes another period that is very obscure, most probably one of division and anarchy, or of foreign invasion, the duration of which is unknown. But beyond this is the series of the sixth, fifth, and fourth dynasties, of which the inscriptions and religious paintings and funerals manifest the constitution of the administration of affairs, and almost the etiquette of the court, also details of the funeral rites and of domestic life,

\* "Sinai and Palestine," p. 57.

\* Which made the Lake Moeris and the Labyrinth.



to the time when the chronological reckoning is lost. Beyond, scarcely anything is known more than that the third as well as the fourth dynasty had its seat at Memphis, and the first two their seats at This; perhaps the kingdom of Thinites was contemporary with the former dynasties.

Thus, before Moses, were three very long periods, separated from one another by undetermined intervals, each of which abounds in texts of every kind preserved in the original. There is also a great work on Egyptian theology of more than a hundred and sixty chapters, of which a part exists in manuscripts anterior to Moses, some portions of which are engraved on one or more sepulchres anterior even to the twelfth dynasty. Concerning the value of the conclusions drawn from the hieroglyphic writings, it is proper to say that though they often present subtleties hard to comprehend, and grammatical difficulties, the principles on which they are used and their general meaning have been carefully and intelligently studied out, and no room has been left for any serious mistake in the matter. Great aid has been rendered in the study and translation of the Coptic, the liturgical language of the native Christians, which it has been found is hardly more different from Pharaonic Egyptian than Italian from Latin.

Numerous monuments exist in the region of the Euphrates and the Tigris, the country of the Abrahamic ancestors of Israel, with inscriptions in the cuneiform characters, and texts preserved on cylinders of clay, which, besides being of the greatest historical value, give important information concerning political conditions and the religious beliefs and rites of many centuries anterior to Moses.

These texts present a doctrine remarkably different from the later Babylonian religion with which that of the Assyrians, or Ninevites, was nearly identical. It is known by numerous texts and accordances during a long succession of centuries. The difference of the two doctrines does not represent the simple opposition of a sect, but rather a distinction of races marked by one of languages. The documents of that country which are not Babylonian are written in an idiom called Sumerian by M. Oppert and Accadian by M. Lenormant, or rather two dialects distinguished by those names, representing a language analogous to that of ancient Media.

The preserved copies of the Sumerian or Accadian mythological texts came from a royal library (of clay cylinders) of the seventh century before the Christian era, where they were preserved with, and without, Assyrian translations; the texts themselves go back to an epoch very ancient, and far anterior to the fifteenth century B. C. Among them also is a mythological epic poem in the Babylonian language, in which there is a recital of the Deluge nearly like that in the book of Genesis.

Ascending further back into the pre-monu-

mental periods from which these texts descend, we draw nearer to a monotheism of which the character is more or less exalted, or more or less gross, according to the races of men; and which passes very easily into a real polytheism, but which, nevertheless, manifests itself as a point of departure, and not as a point of arrival.

M. Pictet, in his "*Origines Indo-Européennes*," establishes also the spiritualistic character of the primitive civilization of the whole Aryan race, by going back to the epoch when the Hindoos, Slavs, Iranians, Celts, Hellenes, and Germans, lived together and spoke only one language; or, to express it more precisely, by ascending up to the epoch when the common ancestors of all these people formed only one great Japhetic tribe. The common roots of different Indo-European languages, expressing sensible objects, have enabled him to recognize very many elements, both material and intellectual, of the ancient civilization, which was that of our common ancestors; and the proper signification and etymological relations established by the comparison of words representing moral and religious habits, offer a forcible and solid answer to that hypothesis which assumes that the point of departure of the human race was from a bestial state.

There are extensive and numerous Egyptian texts ascending up to the epoch of the sixth, fifth, and fourth dynasties, and some lines whose date was at the end of the third dynasty. It was during the fourth dynasty that the great pyramids of Gezeh were built. The inscriptions are most frequently funeral. There is found, also, in one of the tombs of that epoch, an autobiography of a high functionary, a real page of contemporary history. There is also, on papyrus, a book on morals and religion, composed a very few generations after the construction of the great pyramids; and a copy of that book which has been traced to the time of the ninth dynasty, a number of centuries anterior to Moses. Religious and historical texts abound on the monuments of the twelfth dynasty; and the eighteenth dynasty, which is wholly anterior not only to the writing of the Pentateuch, but probably to the birth of Moses, is one of the richest in monuments of every kind; and these monuments have been decorated with a profusion of hieroglyphic texts.

At the age of the pyramids, an epoch which nearly touches the cradle of the Egyptian monarchy, probably but little separated from the first dispersion of the descendants of Noe, the fundamental principle of the religion of Egypt was monotheism, or one God. But very early also, the imperfect language of that theology, the figurative denominations by which it expressed the attributes or the acts of the divinity, afforded an occasion for polytheistic and mythological interpretations which, without doubt, dominated the popular sentiment of an epoch very remote.

Mythological polytheism grows toward the Græco-Roman period. Monotheism becomes

enfeebled and obscured as the centuries from a more remote antiquity accumulate.

In 1855, in a summary notice of the Egyptian monuments of the Louvre, M. de Rouge thus expressed himself: "It will be very incorrect to think that the multitude of divinities adored by the Egyptians had completely obliterated from their minds the knowledge of the Supreme God, whatever may be the local name which they gave to him. He is often designated by expressions which do not permit a doubt on that point. 'He is the only being in truth living,' said the sacred legends; 'He has given birth to all beings and to all inferior Gods'; 'He has made all things, and he has not been made'; finally, 'He has begotten himself.'"

The Egypt which Menes united under his scepter was divided into nomes, having each a capital city; each one of these regions had its principal deity, designated by a special name; but it is always the same doctrine that is expressed by the different names.

"God is the creator"; "He has made the heavens," "He has created the earth," "He has made all things which exist." "Thou art alone, and the millions of beings come from thee"; "He is the Lord of beings and of non-beings." These texts are at least fifteen hundred years older than Moses.

"God has regulated the order of nature." From him comes likewise the moral element. Murder, theft, adultery, fraud, are pursued in his name through all the details of social life. The sanction to that morality which is so complete is not wanting: it is the immortality of the soul.

A treatise on morals, called by M. Chabas the oldest book in the world, is the work of Phata-Hoteph, a son of King Assa. This belongs to the fifth dynasty, and invokes Osiris; but this Osiris, the only god of Egypt named in the manuscript, is the abstract idea of the divinity. It occurs frequently in the text. The same name Osiris signifies *the seat of action*, that is to say, he *who made all things*.

A sarcophagus of the eleventh dynasty bears these words, which have been found in the seventeenth chapter of the treatise of Phata-Hoteph: "I am the great existence by myself; I am the law of the existence of beings."

In that chapter seventeen is also clearly expressed the idea of purification necessary to a human being, and that of moral responsibility is very lengthily explained to the hundred and twentieth chapter, where are enumerated the faults of which the deceased should be innocent in order to be deified in the other world; an enumeration which expresses, especially in the most ancient manuscripts, a very elevated moral sense.

In the new Egyptian empire, which commenced with the eighteenth and nineteenth dynasties, the mythology is more developed; but the current of the ancient traditions continues to struggle against the invasion of poetic

or popular dreams. At the beginning of the nineteenth dynasty, the period of the youth and ripe age of Moses, is clearly seen the tradition of the sanctuaries still maintaining itself in the liturgic poetry.

M. MARIETTE'S RESEARCHES IN EGYPT.—Extensive excavations were conducted in Egypt for several years previous to 1881, under the direction of M. Auguste Mariette, more recently known as Mariette Pasha, who, after spending four years on his own account in exploring and laying open the remains of the Serapeum, or tomb of the Apis bulls at Memphis, was appointed by the Khedive Ismail Conservator of Monuments to the Egyptian Government, a position which he held for more than twenty-five years, till his death, in January, 1881. His works were executed in different parts of the country where objects of prominent interest could be looked for, and included the disinterment of the magnificent temples of Denderah and Edfoo, and the recovery of thousands of valuable inscriptions; the uncovering of the Sphinx, and the discovery of the mysterious building known as the Temple of the Sphinx; extensive operations at Karnak, Deir-el-Baharee, Medinet Haboo, and Abydos; the projection of a systematic exploration of the pyramids, beginning with those at Memphis and Sakkara; and the formation of the museum at Boolak, where it is designed to store and preserve, under the eye of the Government, all the portable antiquities that may be found. At the time of his death M. Mariette was contemplating, in further investigation, the search for, and exploration of, the ruins of This or Teni, the seat of the foundation of the empire and of the royal house of Menes; the examination of the wall-decorations of the tombs of the ancient empire, which, formerly supposed to represent actual scenes in the life of the deceased, he believed, from the uniformity of their character, and other evidences of their ideality, rather to shadow forth the views of the future life, and to be capable of affording valuable illustrations of the ritual and theology of the Egyptians; and a more thorough examination of the Sphinx, to discover whether there be a tomb, or chamber, hidden within it.

OPENING OF PYRAMIDS.—The work begun by M. Mariette was taken up where he left it by his successor, M. Maspero, who, with Dr. Brugsch, is continuing it on the same general plan, and with the same ultimate ends in view, that were entertained by him. Among M. Mariette's last work was the opening of three of the pyramids at Sakkara: those marked on Perring's Map of the Pyramids as numbers 5, 6, and 8. The last-mentioned pyramid was found to be bare. Of the other two, number 5 proved to be the pyramid of Pepi Rameri, and number 6 that of his son and successor, Merenra, of the sixth dynasty, two of the most distinguished monarchs of the ancient empire, of whose reigns we have also in the biography



of a high officer, Una, who served under them, the most satisfactory contemporary record yet discovered in the tombs. The pyramid of Pepi, who is supposed to be the Phiois II of Manetho, contained two chambers, only one of which is accessible. The walls of this one bore long and remarkable inscriptions, while fragments of other inscriptions were lying around on the floors. The sarcophagus, of basalt, had been partly destroyed, but was seen to be of extraordinary massiveness, being 106·5 inches in length, with the sides 12·2 and the bottom 20 inches in thickness. It contained a wooden coffin, with a body, not embalmed, but wrapped in a cerement of very fine linen, steeped, probably, in cedar-oil, which was removed to Boolak. The sarcophagus bore the inscription, "The Life of the King of Egypt, Ra \* \* \* i [Rameri], the Ever-living." Near the sarcophagus was a monolithic square box or well, of granite, with a lid of granite propped up, but without grooves or pin-holes. The inscriptions in the chamber relate entirely to the religion, and not at all to the history, of the king. In them he is always named Pepi, the second name not occurring in the chamber itself, but only in the passage, where it is un mutilated, and may be read easily as Rameri. Many places are named, among them An (Heliopolis) and Abood (Abydos), but not Thebes.

Professor Maspero began his work, in February and March, 1881, with the opening of Pyramid No. 4, of Perring's map, which proved to be that of Unas, the last king of the fifth dynasty, a monarch whose name—erroneously, as it now appears—had been before associated with the flat-topped pyramid known as the Mastabat-el-Faraon. The chamber had already been violated by the tomb-breakers of the Græco-Roman period. The corridor was lined with polished granite and fine limestone, the latter covered with hieroglyphics filled in with green, and the ceiling was adorned with stars of the same color. This passage led into a chamber with inscribed walls, whence another corridor led to a chamber containing niches for funereal statues, and thence a passage next ending in the burial-chamber of the king. Three of the walls of this chamber were covered with inscriptions, and the fourth wall with fine alabaster richly painted with decorative designs. The texts on the walls are almost identical with those upon the walls of the tomb of Pepi Rameri, and are similar to other texts found on certain little-known tombs at Thebes. The sarcophagus was of black basalt, with no inscription. The lid lay in one corner of the chamber, and the mummy had been pulled out and broken up, so that only fragments of it were recovered, though it is hoped that other parts of it may be found in the rubbish. M. Maspero next projected the excavation of the pyramid of Meydoun, which is associated with the name of Senefru, the next to the last king of the third dynasty, but his success here was anticipated by the discovery in July,

1881, of the mummies and relics of the kings, queens, and princes of the seventeenth, eighteenth, nineteenth, and twenty-first dynasties at Deir-el-Baharee, near Thebes.

**DISCOVERY OF ROYAL MUMMIES AT THEBES.**—The existence of an important deposit among the hills west of Thebes had been known for many years to the Arabs, who carried on a lively trade in the relics they took from it, and carefully kept the knowledge of its situation to themselves. The attention of Daoud Pasha and Herr Emil Brugsch was drawn to the matter by the appearance of an unusual number of relics in the market, and they secured the arrest of the Arab who appeared to be the leading dealer, and extorted from him a revelation of the hiding-place. In a rock chamber hitherto unknown, behind an ancient temple, were found twenty-nine mummies, of which seven were of kings, nine of queens and princesses, and five of persons of distinction, many of them with the flower-wreaths which were deposited on them at their burial, still lying withered on their breasts, 3,700 mortuary statues, a large leather tent or canopy, and a number of papyri, four of which were very large and quite perfect. The mummies had evidently been brought to the place in haste, and had been deposited there in some confusion. Some of them were in cases not their own, and several cases were without occupants. The identification of them was consequently difficult for a little time; but the following list, which is arranged by dynasties, was finally determined upon as correct. The asterisk indicates a mummy-case from which the mummy which is presumed to have been originally present, but afterward removed or stolen, is missing.

**SEVENTEENTH DYNASTY.**—(Approximate date) B. C. 1750 to B. C. 1703. King Rasekenen Taaken, Queen Ansera. **EIGHTEENTH DYNASTY.**—(Approximate date) B. C. 1703 to B. C. 1462. King Ahmes Ra-neb-pehti (who completed the expulsion of the Shepherd Kings), Queen Ahmes Nofretari, Queen Aah-hotep, Queen Merit-Amen, Queen Hotimoochoo, Prince Se Amen, Princess Set-Amen, King Amenhotep I, King Thothmes I,\* King Thothmes II, King Thothmes III, Queen Sitka. **NINETEENTH DYNASTY.**—(Approximate date) B. C. 1462 to B. C. 1288. King Rameses I,\* King Seti I, King Rameses II (the Sesostris of the Greeks, and regarded by most Egyptologists as the Pharaoh under whom Moses was brought up). **TWENTIETH DYNASTY.**—Not represented. **TWENTY-FIRST DYNASTY.**—(Approximate date) B. C. 1110 to —? Queen Notem-Maut, King and High-Priest Pinotem I, King Pinotem II, Prince and High-Priest Masahirti, Queen Hathor Hout Tani, Queen Makara, Queen Isi-em-kheb, Princess Nasi Khonsu, Prince Tat-f-Ankh, Nebeni (a priest), Noi Shounap (a priest). It is supposed, and some hieratic inscriptions made on the mummy-cases of Seti I and Rameses II at the time of the removal confirm the supposition, that the mummies and treasures were



removed to this spot during some time of disorder, for concealment and preservation.

**THE PYRAMID OF SENEFRU, AT MEYDOUM.**—The discovery of the entrance to the pyramid of Senefru, at Meydoun, was published at the beginning of 1882. This pyramid is called by the Arabs the false pyramid, because they believe it to be formed of the rock itself. It is built in three stages, each of which is inclined

excavations of them for the purpose of learning their real significance. Dr. Brugsch Pasha and M. E. Revillout have begun a study of the demotic papyri of the times from the twenty-sixth dynasty down, of which several thousand documents exist in the European libraries. The demotic was the business and familiar hand of the Egyptians, and these papyri are expected to throw a flood of light upon their



THE PYRAMID OF MEYDOUM.

at an angle of  $74^{\circ} 10'$ , and rises to a height of one hundred and twenty-two feet from the midst of a high hill of fallen masonry and rubble. The outer masonry is of admirable workmanship, and the general effect of the structure is imposing. The pyramid proved to be formed, for at least half its height, around a core of natural rock. The entrance gave access to a steep descending passage leading down into the living rock, with chambers constructed on a plan reminding the explorers of that of the corresponding chambers of the great pyramid. No inscriptions were found except brief hieratic writings recording the visit of two scribes in the twentieth dynasty. This pyramid is considered to be nearly one hundred years older than the great pyramid of Gizeh. Its date would be, according to Brugsch's chronology, 3766, according to Mariette's, 4200, B. C. M. Maspero believes that the pyramids, beginning with those of the fourth dynasty at Gizeh and ending with those of the thirteenth dynasty at the Fayoom, represent the tombs in succession of the monarchs of those and the intervening dynasties, whose history is as yet wholly unknown; and he has, since the conclusion of the recent war, resumed his systematic

laws, social condition, and every-day and private transactions.

**RECENT ASSYRIAN AND BABYLONIAN RESEARCHES.**—The investigations in the mounds of Assyria and Babylonia continue to furnish information of the highest interest and value. Copies of the records and literary works of hundreds and perhaps thousands of years were accumulated in the library of Assurbanipal at Nineveh, and are now recoverable, in a state more or less mutilated, it is true, but of approaching completeness for many works. Another library of still older date was discovered in 1881 at Sippara, in Babylonia. The Chaldean narratives of the creation and the deluge, first brought to notice and translated by Mr. George Smith, from the library of Assurbanipal, have been restudied, retranslated and revised, with the result of depreciating some of the resemblances which Mr. Smith thought he could trace between them and the Biblical record, but without essentially destroying their general parallelism with the Hebrew sacred narrative. The Assyrian historical narratives are clear and precise, and furnish definite statements of the chronological relations of events to each other, by which their dates according to our



notation can be accurately fixed in many cases to within a few years. In this respect they are of much greater value than the texts of the Egyptians, who, so far as appears from any of their documents yet discovered, seem to have had no historical sense. The contract tablets, commonly known as the Egibi tablets, extending from the first year of the reign of Nebuchadnezzar II to the reign of Darius Hystaspis, give an almost unbroken series of dates, which are in nearly precise agreement with the corresponding dates furnished by the canon of Ptolemy. Among the more recent discoveries is a document containing a list of about two hundred of the earliest kings of Babylonia, beginning with the first kings after the flood, and apparently corresponding, to a certain extent, with the first six or seven dynasties of Berosus. Investigations at Tel-loh, the Zirgula of antiquity, by M. de Sarzec and Mr. Hormuzd Rassam, working independently of each other, have brought to light relics of kings of the thirteenth and fourteenth centuries before Christ, and statues and inscriptions indicating that the earlier period of Chaldean art was better than the later, or Assyrian period. A tablet found here, a copy of the original work, gives a synchro-nous history of Assyria and Babylonia, relating the occasions when, either for peace or war, the rival monarchies came into contact, and enables us to determine the dates of their kings and to reconcile some discrepancies that seemed to exist in other lists. The events treated of in this document occurred between 1400 and 891 B. C. At Abou-haba, about sixteen miles southwest of Bagdad, Mr. Rassam has discovered the ruins of Sippara, the seat of the sun-god worship, one of the most ancient cities of Babylonia, and the place where, according to the story of the deluge as related by Berosus, Xisuthrus buried the tablets giving the account of the flood, and "the history of the beginning, progress, and end of all things." Here Mr. Rassam was so fortunate as to find, almost at the beginning of his investigations, the temple of the sun-god itself, and within it a memorial stone bearing figures emblematic of the sun-worship, and inscriptions, among which were the words, "To the Sun-god, the great lord, dwelling in Bit-Parra, which is within the city of Sippara." The stone is dated in the reign of Nabupaliddina, of the ninth century B. C., and speaks of the destruction of the original temple by invaders called the Sutu; then relates that Simas Signu, the fortieth in the list of two hundred early kings already referred to, commenced its restoration, and that the work was carried on by another monarch, E-Ulbar-Sakin-Sumi, or E-Ulbargarmu, but that it remained for Nabupaliddina finally to destroy the Sutu and complete the building. The stone seems afterward to have been broken, and repaired and inclosed in an earthen box, in which Mr. Rassam found it, probably in the time of Nabopolassar, and the temple to have been subsequently repaired and

adorned by Nabonidus, who placed in it clay cylinders recording the event. The monuments found here indicate the existence of another city of Sippara, called Sippara Anat, which Mr. Rassam also probably identified, and the twin cities are believed to correspond with the Sepharvaim of the Bible. In the mounds of Hubi Ibrahim, or Tel Ibrahim, some ten miles east of Babylon, Mr. Rassam found the ruins of the city of Cutha, the chief literary and scholastic center of the Babylonians, whence came the "men of Cutha," who were placed in Samaria by the Assyrian conquerors (2 Kings, xvii, 24, 31), and identified there the great temple of the war-god Nergal, "the god of Cutha" of the book of Kings, and his consort Laz. One of the cylinders deposited by Nabonidus in the temple at Sippara, when he made repairs in it, as related above, bears inscriptions in which occurs a statement that when burrowing beneath the temple, forty-five years after Nebuchadnezzar had sought for the ancient cylinders in vain, he had had revealed to him "the cylinder of Naramsin, son of Sargon, which for 3,200 years no king going before me had seen." These 3,200 years added to the date of Nabonidus, say B. C. 550, would give for the date of Naramsin, B. C. 3750, two thousand years earlier than the date assigned to him by Mr. George Smith, and about 1,600 years earlier than the earliest date previously definitely specified in the cuneiform inscriptions. The inscriptions of the time of Gudea, one of the earliest monarchs whose statues were found at Telloh, or Zirgula, show that a lively intercourse already existed in his remote time between Chaldea and Egypt.

THE HITTITES.—Much advance has been made within three years in the knowledge of the Hittites, of whom little had been known except what was suggested in a few brief references in the Bible and in the Egyptian accounts of their Asiatic wars, where they are called the Kheta. The Hittites have been proved, however, to have been a very considerable nation in the ages previous to the Trojan war, who probably played as important a part in the history of the world as the Assyrians or Egyptians, and of whom Brugsch, calling them a "powerful and cultivated people," says that "their rule in the highest antiquity was of an importance which we can now only guess at." They were at times among the most formidable enemies with whom the Egyptians had to contend; at other times their valuable allies. The first regular treaty of which there is a record, and of which a copy is preserved, was between their king and Rameses II, and contained provisions worthy of the highest civilization of modern times. The study of their monuments, of which the formerly puzzling and wholly unintelligible inscriptions, called the Hamath inscriptions, were a part, and of other contemporary records, has shown that their empire, or their influence, formerly extended from their southern capital at Ka-



desh on the Orontes to the Ægean Sea; that from the seventeenth century to the twelfth century B. C., they were the leading power of Western Asia, holding the balance of power between Egypt on the one side and Assyria on the other; and that it was through them that Assyrian civilization was transmitted to the Phœnicians and thence to the Western nations. Their capital, Carchemish, was identified by Mr. J. H. Skene and Mr. George Smith, during the last expedition of the latter gentleman to the East, at Jerablis, on the Euphrates River, a short day's journey south of the town of Bir-edjek. This city gave its name to the Mina of Carchemish, which was for centuries the standard weight throughout Asia Minor, and is mentioned in the Assyrian inscriptions. A second Hittite capital was identified by Lieutenant Conder in 1881 at Kadesh, on an island in the Orontes River, the present leading topographical features of which are almost exactly reproduced in a representation of the siege of Kadesh on the Egyptian monuments. Two figures of a warrior carved in the rocks at the pass of Karabel, now known to have been established by the Hittites as evidences of their dominion, have been identified with the figures described by Herodotus as existing in that region, and supposed by him to have been erected by the Egyptian Sesostris as memorials of his conquest.

The Egyptian and Chaldean monuments and inscriptions, revealing purer religious notions and higher moral principles, and displaying better taste in design and greater skill in execution the further back in antiquity we trace them, demonstrate that, among historical nations at least, the earliest generations were equal, if not superior, in spiritual discernment, intellectual capacity, and the essentials of civilization, even if they had acquired less of the knowledge that comes from observation (which is not shown), to those which succeeded them. Not till the period of the bloom of the Greek intellect in the age of Pericles do we find evidences of as high a civilization as prevailed in the first six Egyptian dynasties and in the earliest Chaldean empire.

**ELECTRICAL ENERGY, STORAGE OF.** The importance of a thoroughly commercial secondary or storage-battery to the future industrial development of electricity can hardly be overestimated. Without it, the current generated by the dynamo-machine must be used at the time and rate of production; but with it, this is no longer necessary, as the energy stored up in it by the primary current may be utilized within certain limits at any time and rate desirable. Further than this, it allows of electricity being used under circumstances inadmissible with currents direct from a machine, and also enables the current to be generated by various sorts of motors which can not well be used when the current is to be directly applied. It enables us further to practically convert currents of high tension, which are the most economi-

cal to transmit to a distance, into those of low tension suitable for domestic and industrial use, and thus becomes a very important factor in any extensive system of distribution, and in the transmission of power.

The possibility of storing the energy of an electric current, by means of such a battery, depends upon the fact that the electric battery, like the dynamo-machine, is reversible. As is well known, a dynamo-machine may be used either to generate a current when mechanical power is spent in rotating its armature, or in producing mechanical power when a current is caused to circulate in the coils of its armature. Similarly, a voltaic cell may be made to yield a current of electricity by the performance of chemical work, and then to do chemical work by the expenditure of electrical energy upon it. In the ordinary voltaic cell, the current is due to the chemical changes undergone by certain materials, commonly zinc and acid. If we burn a piece of zinc in the air, that is, allow it to unite chemically with oxygen, its store of energy runs down and manifests itself as heat, just as the store of energy in coal is given out as heat when the coal is burned. In the electric battery, however, the zinc is burned indirectly, and a part of its energy becomes available for the maintaining of an electric current. When the zinc has united with the acid to form sulphate of zinc, its store of energy becomes exhausted, and further work can be obtained only by a continued supply of the metallic fuel. If there were no other way of renewing this supply of fuel except by the direct furnishing of more of the metal, such a battery would be useless for any purposes requiring a considerable expenditure of energy, owing to the high price of the zinc as compared with coal. There is, however, another way. In the case of coal, there is no way of separating the carbon from the oxygen with which it has combined in combustion, and our supply of energy can therefore only be maintained by keeping up the supply of the coal. In the case of an electric battery, however, it has been discovered that, after the zinc has combined with the oxygen of the liquid, it can be recovered from its solution and again deposited in the metallic form, so as to be again available as a source of energy. To recover this fuel, it is only necessary to send a current of electricity through the battery in the opposite direction to that taken by the current furnished by the battery, when all the operations of the battery will be reversed, and it will again be in a condition to furnish a current. To separate the zinc from the oxygen with which it is combined, of course requires power, and if to exert this power it were necessary to consume zinc in another battery, there would be no gain. But we are not compelled to do this. We can use the vastly cheaper energy of coal to generate our current, through the medium of the dynamo-machine, and thus produce our battery-current at a cost within the limits of economic



requirements. When we send a current through a battery in this manner, its energy is employed to tear away the zinc from the oxygen with which it is combined. This liberated zinc constantly tends to recombine with the oxygen, and in so doing sets up a current opposed to the charging one; this latter current must, therefore, have a sufficient electro-motive force to prevent this recombination. The counter-electro-motive force manifests itself even in ordinary batteries while they are furnishing a current, resulting in its gradual weakening. In this case a portion of the zinc is separated from the solution by the action of the liberated hydrogen, and this zinc in reuniting with the oxygen sets up an opposing current.

This action was noticed very shortly after the invention of the voltaic cell, and the improvements successively made in this cell have been chiefly with a view of preventing, or at least minimizing, this counter-action. The phenomenon to which the name "polarization of the electrodes" was given, was studied by many eminent electricians, but it was not until taken up by M. Gaston Planté that it received a thorough and comprehensive treatment, or that a practical form of cell for utilizing the secondary current was produced. Ritter, of Jena, observed the phenomenon of polarization in 1803, while studying the chemical action of currents upon liquids, and later constructed a secondary pile consisting of a series of disks of copper separated by disks of cloth moistened with sal-ammoniac.

The phenomenon of polarization was placed upon its true basis by the researches of Volta, Marianini, and Schönbein, some years after the experiments of Ritter, and our knowledge of it further enlarged by the labors of Davy, De la Rive, and Faraday. In 1842 Grove constructed his now well-known gas-battery, which consisted simply of two plates of platinum dipped into acidulated water. A current being passed through this battery, the water is separated into its constituents, oxygen and hydrogen. Platinum possesses the property of condensing these gases upon its surface. One of the platinum plates becomes coated with oxygen, and the other with hydrogen, as the decomposition of liquid proceeds. These gases constantly tend to reunite, and, when the charging current ceases, the energy stored in these separated gases is given out by their recombination—as heat if the gases are mixed and burned, as electric energy if the gases are allowed to recombine through the liquid. The subject was taken up in 1860 by M. Planté, who re-examined the whole question, and experimented with many different metals as electrodes and many different liquids as electrolytes. His experiments resulted in showing that the best results were given with lead electrodes immersed in dilute sulphuric acid. Such a cell can furnish no current before it has first been charged by means of a current, as there is no chemical difference between the plates.

When, however, a current is sent through the cell, the liquid is decomposed, and the oxygen escaping at one electrode combines with the lead, covering its face with a film of peroxide. Planté found that to get this film sufficiently thick and also to get the other plate in the best form for effective action, the current had to be sent through the cell a great number of times, first in one direction and then in another. When the current is reversed, the hydrogen liberated combines with the oxygen already on one electrode to form water, leaving this plate with a spongy metallic surface which facilitates its conversion into peroxide of lead when the current is again sent in the opposite direction. After being charged and discharged a number of times, the plates are in a shape for effective use, one plate being coated with peroxide of lead, and the other having a spongy, metallic surface. Upon then closing the circuit of the battery a current is produced which continues as long as there is a chemical difference between the two plates, the chemical action which takes place being the partial reduction of the oxidized plate, and the oxidation of the metallic one. Planté applied his battery to various industrial uses, chiefly in surgical cautery; but the time required to prepare the cells for use, as also that necessary to store up a charge, was too great, and the capacity was also too small to allow them to have any extended application in the rapidly developing electrical appliances of the present time. In 1880 M. Camille A. Faure made a change in the Planté cell, which, though very simple in itself, was of great industrial importance, as by it the storing capacity of the cell was largely increased, and the time necessary to charge it much reduced. M. Faure's improvement consisted simply in coating both electrodes mechanically with red-lead. With this construction the oxide on one plate is reduced, and the other plate further oxidized to the peroxide, when a charging current is sent through the cell. This battery, having an immediate commercial value, has been put very prominently before the public, and its merits examined into by a number of competent experts. Since Faure showed that the secondary battery could become commercially serviceable, the attention of inventors has been largely turned in this direction, and various different accumulators have been brought out, the object of the improvements being to reduce the weight of material as much as possible in relation to its storing power. To this end M. de Meritens has devised a cell in which the lead plates are constructed of thin, overlapping laminae arranged in a manner similar to the slats of Venetian blinds. It is more powerful than a Faure cell of the same weight. In another cell, devised by Messrs. Sellon and Volckmar, the lead plates are perforated and the red-lead forced into these perforations, thus giving a much greater amount of the oxide per pound of the metal than when oxide is on the surface



simply. In the accumulator of M. de Kabath, increased surface is obtained by the use of a great number of thin, corrugated plates. Mr. C. F. Brush, the inventor of the well-known arc lamp bearing his name, has also experimented extensively with lead accumulators, and has produced one which his company in this country intend to use for supplying incandescent lamps. His improvements consist in various modes of constructing the plates, so as to render them durable, and increase their storage capacity. A storage-cell, which is in fact a reversible Daniell battery, was devised by Messrs. Thomson and Houston, of this country, in 1879. This cell consists of two sheets of copper placed horizontally one above the other in a solution of sulphate of zinc. The current, in charging, is sent through the battery from the top to the lower plate, when the upper plate dissolves, forming sulphate of copper, which floats upon the sulphate of zinc. Metallic zinc is deposited upon the lower plate. This cell will yield a current as long as there is a chemical difference between the electrodes; that is, until the zinc is all reconverted into the sulphate. This has been modified by M. d'Arsonval, who makes use of an electrode of lead, or of carbon covered with lead shot, and one of zinc. When the cell is charged, the zinc is deposited upon the zinc plate and the lead peroxidized.

A battery which has received very little attention, but which seems to be superior to any other yet produced, is one invented by Mr. Henry Sutton, of Ballarat, Victoria. It was described by him in a paper before the Royal Society, London, in December, 1881. Mr. Sutton experimented with both the Planté and Faure batteries, and tried many different combinations. He finally found that positive electrodes of amalgamated lead produced the best results, and, in experimenting with a view to determining the best negative electrode, came to the conclusion that, "by having negative electrodes whose oxides should be soluble in the solution, and which could be redeposited from the solution, or by having metallic solutions from which metal could be deposited, the resulting solution being such that should, on the oxidation of the deposited metal, combine with the oxide and again form the original solution," he would obtain "a powerful and constant source of stored energy." To this end he tried cells in which the negative electrode consisted of zinc, iron, or copper, and the positive of amalgamated lead, the liquid being in each case the sulphate of the metal of the negative electrode. Zinc was abandoned, because of the necessity of amalgamating it to prevent local currents, and the iron because of its oxidation when the cell was not in use. The form of cell, therefore, finally adopted consisted of an amalgamated lead plate for the positive and a copper plate for the negative electrode, the liquid being sulphate of copper. The chemical action in this cell, when a current is sent

through it, consists in the combination of the oxygen of the decomposed solution with the lead, forming a coating of the insoluble peroxide, and the replacement of the copper in the solution by the disengaged hydrogen, the copper being deposited on the negative plate. When the action is complete, the positive electrode is oxidized, the negative coated with copper, and the solution converted into hydric sulphate and water. In discharging, the copper is dissolved in the solution and the lead plate reduced, the cell returning to its original chemical condition. A practical form of the cell consists of a series of amalgamated plates, fitted in grooves in a box, as in Cruikshank's trough-battery, the spaces between the plates being filled with a solution of sulphate of copper. The positive sides of the plates then become peroxidized, and the negative sides coated with copper. The inventor states that the cell is in every way superior to the Faure, and, wishing to preserve it free from any private claims, he has refrained from taking out any patents upon it.

The value of the secondary battery as an element in industrial applications of electricity depends both upon its efficiency—that is, the percentage of the work expended upon it which can be utilized—and upon the cost of production. This latter, of course, depends directly upon the former, and both together determine the investment necessary in any case. It is chiefly as a question of investment that the efficiency has importance, as the item of fuel is a comparatively small one in comparison with that of the investment in any considerable electrical plant.

The Faure is as yet the only cell which has been experimented upon to any extent, but the results so far obtained by different experimenters are discordant, and it is not yet known what the efficiency of this cell is. There are certain conditions that must be observed, both in charging and discharging, and if these are not fulfilled the results may fall very far short of the maximum. If the charging is done too rapidly, part of the energy is wasted as heat in the cell, and if the discharge takes place too quickly, energy is also wasted by the production of heat. Care must also be taken that the cell is completely discharged. A peculiarity of the secondary battery is that, after being rapidly discharged, it will yield, upon standing some time, one or more residual charges, which may be greater than that first given off. In order to charge such a battery with the least loss of energy, the charging current should be of ample quantity, and of an electro-motive force but slightly in excess of that which the battery can attain. The discharge should be made through a resistance that will prevent its being too rapid. The best rate of discharge must be found by experiment. The first careful experiments upon the Faure cell were made at the Conservatoire des Arts-et-Métiers, in January of this year, by M. Tresca and his associ-



ates, the results of which were communicated to the French Academy in March. The experiments were undertaken to obtain—1. The mechanical labor expended in charging the battery. 2. The quantity of electricity stored up during the charge. 3. The quantity of electricity given out during the discharge. 4. The electrical work actually effected during the discharge. And they showed that of the total quantity of electricity introduced in the battery, 90 per cent was given out again, and that 60 per cent of the total electrical work spent in charging was recovered during the discharge. The accumulator therefore absorbed 40 per cent of the electrical work that would otherwise have been available in the lamps through which the discharge was made. So great a loss as this would place the accumulator without the limits of commercial utility in most cases, if further experience shows that this is the utmost efficiency to be obtained. The results of various other experimenters, however, show the loss to be considerably less. Sir William Thomson concluded from his experiments that the probable loss in charging is 10, and in discharging 15 per cent, while Professor Ayrton states that this loss, in a well-constructed cell, properly charged and discharged, need not exceed 18 per cent, and, if the discharge be sufficiently slow, this may be brought down to 10 per cent. If so high an efficiency as 80 per cent can be obtained in actual use, it is very probable that the accumulator will be found a thoroughly practical apparatus, which can be used with advantage in almost all the applications now made of powerful electric currents. But whether its efficiency reach this figure or not, it may still be a valuable adjunct in many cases, for it must be borne in mind that its real value in a commercial sense is not determined solely by its own efficiency. If by its use the efficiency of other apparatus forming an element of an electrical system can be raised, the gain might in some cases be sufficient to nearly, if not quite, neutralize the loss due to the accumula-

tor itself. In the case of incandescent lighting it is quite possible that the efficiency of these lamps may be considerably increased, as there is no danger of the lamps being destroyed by a sudden increase of current, and they may therefore be run nearer their breaking limit, and consequently more economically. The life of the lamp will probably also be found to be greater than when run direct from the machine. The advantage of an apparatus in a system of distribution which increases the reliability of the supply is one of no small amount, and may rightly be considered to have an economic value.

Too little is yet known, both of the first cost of accumulators and of their depreciation, to be able to judge whether their use will decrease the investment necessary, in a system of distribution, below that required without them. In this country the Brush Electric Light Company proposes to place accumulators in the houses of consumers, and charge them with the currents used for its arc-lamps. A large number of local Brush Companies are now engaged in furnishing arc-lamps, and have the plant for the purpose. These lamps are in use at the most from six o'clock in the evening until six the next morning, so that the plant is idle, or nearly so, twelve hours out of the twenty-four.

By using accumulators, this plant can be run continuously, and a saving of course effected, so far as machines and street conductors are concerned. The company has as yet furnished no figures as to the investment required for the storage-batteries, and hence the economic feasibility of the plan can not be determined, though the company asserts that in this regard it is entirely satisfactory.

The only figures yet given of the price of accumulators are those recently put forth by the Electrical Power Storage Company, of England, which has begun the manufacture and sale of the Faure-Sellon-Volekmar and the Sellon-Swan batteries. The company has issued a circular in which information is given as to

E. M. F. of lamp in volts.	Number of cells composing accumulator.	Rate of discharge in amperes.	Maximum charging capacity in amperes.	PRICE OF ACCUMULATOR.	
				Sellon-Swan.	Faure-Sellon- Volekmar.
				£ s. d.	£ s. d.
45	22 one E. H. P. ....	30-40	400	110 0 0	79 4 0
45	22 two " .....	60-80	800	220 0 0	158 8 0
45	22 five " .....	150-175	2,000	550 0 0	396 0 0
50	25 one " .....	30-40	400	125 0 0	90 0 0
50	25 two " .....	60-80	800	250 0 0	180 0 0
50	25 five " .....	150-175	2,000	625 0 0	450 0 0
60	30 one " .....	30-40	400	150 0 0	108 0 0
60	30 two " .....	60-80	800	300 0 0	216 0 0
60	30 five " .....	150-175	2,000	750 0 0	540 0 0
100	50 one " .....	30-40	400	250 0 0	180 0 0
100	50 two " .....	60-80	800	500 0 0	360 0 0
100	50 five " .....	150-175	2,000	1,250 0 0	900 0 0
110	55 one " .....	30-40	400	275 0 0	198 0 0
110	55 two " .....	60-80	800	550 0 0	396 0 0
110	55 five " .....	150-175	2,000	1,375 0 0	990 0 0

the proper rate of charge and discharge, the size of the cells, and their price. From this circular it appears that cells of three sizes—

one, two, and five horse-power—are at present manufactured; the rates of economical charge and discharge of which are:

	Charge.	Discharge.
	Amperes.	Amperes.
One H. P. cell .....	20- 25	30- 40
Two H. P. cells .....	40- 50	60- 75
Five " " .....	100-125	150-175

The electro-motive force when the cell is first charged is 2.15 volts, and this can be maintained, the circular states, until three fourths of the charge is withdrawn, if the cell be used at the rate of discharge given above. The table on previous page gives the number of cells necessary with different lamps, the total electrical capacity, and their price.

An examination of the above data will show that these cells are very far from answering the commercial requirements of a large electric distributive system. Economy in the charging plant and in the street conductors is attained just in proportion as the time of charging is great compared with that of discharging. The above figures, however, make the former rate two thirds of the latter, and hence, taking into consideration the loss occasioned by the use of the battery, the charging machinery would have to be as large as would be required without it, and no material saving would be experienced in conductors. The battery would therefore appear to be an extra charge upon distribution without any special advantage being gained. According to the above prices 61½ Edison lamps requiring a current of 89 volts electro-motive force, and consuming each .65 of an ampère could be maintained 7½ hours with a battery consisting of 45 one horse-power cells. This would make the investment per lamp with the cheaper cell about \$13. For a plant capable of doing the work of a gas-plant furnishing 1,000,000 feet of gas a day, the investment in batteries, at this rate, would be \$520,000, since a maximum of 40,000 burners would have to be maintained at one time. This is about four fifths of the total investment required for a complete direct plant to accomplish the same work. The investment per lamp with the Swan lamp, which requires an electro-motive force of 47.3 volts and consumes 1.47 ampères of current, would be \$15.84; the Lane-Fox, \$18; and the Maxim, \$17.28.

On the basis of these figures the investment required in batteries is so heavy as to prohibit their use in any extended system of distribution, though they could doubtless be employed in many special cases to advantage. These figures can not, however, be well taken as a basis on which to forecast the economic future of the storage-battery. The above rates of charge and discharge are not necessarily the ones which will have to be adopted, and the prices seem abnormally high. Doubtless these will become considerably lower as the manufacture is improved and the demand increased, and it may not unreasonably be expected that they may be brought within the limits of economic requirements. Of course, whether the cost be brought down to the economic require-

ments of a distributive system or not, there will always remain a considerable field for accumulators, which will continually widen as improvements are effected, and may in time be as extensive as the industrial domain of electricity.

ELECTRIC LIGHTING, PROGRESS OF. The progress of electric lighting during the past year has been chiefly in the industrial development of the various systems, rather than in any striking novelties in the apparatus employed, though a steady improvement has gone forward in this direction. The arc-lamp is continually gaining ground as an out-door illuminant and as a means of lighting large interior spaces, and the incandescent is as certainly making its way in house-lighting. With the exception of the first station of the Edison Company in New York city, the incandescent lamp has not yet been furnished to consumers upon a large scale, but all the prominent companies are preparing to do so at an early date. The Maxim lamp is being supplied to consumers in different parts of New York directly from the various arc-light stations of the United States Electric Lighting Company; while the Brush Company, heretofore occupied exclusively with the arc type of lamp, is about to go largely into incandescent lighting, using for this purpose the Swan incandescent lamp, which it is proposed to run from the Brush storage-batteries.

In London the Edison lamp is being supplied over a limited district, as also at various points on the Continent, while active preparations are being made for its very general introduction. The Swan, Lane-Fox, and Maxim lamps are also being pushed forward by the various companies abroad interested in their success. While it can not be said that the incandescent lamp has yet demonstrated its ability to compete with gas generally in the matter of cost, there is no longer any question about its ability to meet successfully all the other requirements of a general in-door illuminant.

The arc-lamp of the form known as the regulator—that is, the lamp in which the carbon electrodes are placed point to point and the distance between them maintained constant by means of mechanism—and the incandescent lamp, pure and simple, seem to be the only types which promise to survive. Electric candles seem to be making but little headway, while the lamps of imperfect contact or incandescence in the open air, such as the Reynier and Werderman, which promised so well but a few years ago, appear to have been wholly abandoned. These latter lamps, though giving considerably less light for a given expenditure of power than regulators, were yet superior to them both in simplicity of construction and in the steadiness of the light yielded. Much as regulator lamps have been improved, their light is still far from steady, and it does not appear probable that any considerable advance can be expected in this direction. Aside from the unsteadiness due to irregularity of feeding



and of inequality in the carbons, there is that due to the shifting of the arc from one point to another on the surface of the electrodes. If the carbons could be very thin rods, the arc would always form at practically the same points, and irregularity from this cause would be inappreciable. The electrodes must, however, be of considerable size to avoid too rapid consumption, and this difficulty, therefore, appears to be inherent in the practicable form of this lamp. The cost of lamps of this type is also very considerable, even with the quite simple regulating mechanism now used in the best forms. In view of these considerations, it may be questioned whether the abandonment of this type of incandescent lamps has not been premature, and whether we shall not yet see a return to it. Though the amount of light yielded by regulators be greater for a given expenditure of power, it does not, therefore, follow that the equal illumination of a given area will be less costly by them, as it is very well understood that any quantity of light properly distributed gives a more effective illumination than a much greater amount at a few centers.

M. Emile Reynier, one of the earliest inventors of this type of lamp, has recently returned to the subject, and has succeeded in producing a lamp free from the objections of the older forms, and of such extreme simplicity as to leave nothing to be desired on this score. In his former lamp, a carbon pencil resting upon an abutment was fed continuously, by means of a weight or spring, past a heavy carbon contact, the portion of the pencil between this contact and the abutment being incandescent. This construction presented mechanical difficulties to the regular feeding that were not satisfactorily overcome, and the contact interfered with the economy by conducting away the heat. In the present lamp two pencils are used, inclined but slightly to each other, so that they touch at a point a short distance from their points, which rest upon small abutments of copper. The contact which limits the incandescence is therefore a hot contact, and hence no heat is wasted by its means. The form of the lamp is shown in Fig. 1. The carbons, A B, are forced downward by the weights, P Q, sliding upon the metallic guides, C D. The abutments, E F, are of

copper, attached to the bronze arcs, G H. The two halves of the lamps are connected by the insulated clamps, I and J. The weights, P and Q, are insulated from the carbons, which they impel by the caps, r and s. The current enters by the terminal, K, follows the brass guide, C, the arm, G, the abutment, E, and the pointed end of the carbon, A, to the contact, x, at which point it crosses over to the carbon, B, and descends through the abutment, F, and passes out by the arm, H, and guide, D, to the terminal, L. No thorough tests have yet been made of this lamp, but M. Reynier states that the results of experiments so far conducted are very satisfactory. The disadvantage of all lamps of this type is the necessity of using very large conductors, as, owing to the small resistance of the carbon-pencil, it requires a current of great strength to bring it to the proper incandescence. Such lamps can not, therefore, be worked economically upon long circuits, but in separate installations, such as the lighting of workshops, this objection is evidently of but small moment. The same inventor has also devised an incandescent lamp in which he has attempted to obtain a sufficient resistance without resorting to a filamentary conductor, such as is used in all the other well-known incandescent lamps. This increased resistance is obtained by cutting the carbon-rod, which serves as the light-giving portion, several times across, or by notching it. This conductor is inclosed in a glass globe, exhausted or filled with a gas which does not unite chemically with the carbon.

New arc-lamps continue to multiply, but nothing of special importance has made its appearance during the year. This lamp has now reached such a condition that improvements to be expected in it are of a kind having a manufacturing value chiefly—such as will decrease the cost of production, and increase its serviceableness in use.

In the matter of generators two new dynamo-machines have lately been brought to the attention of the public in England: one is the invention of Mr. J. E. H. Gordon, and the other that of Sir William Thomson and Mr. Ferranti. This latter was very much talked of previous to being exhibited; but the extravagant expectations in regard to it can hardly be said to have been realized. It is an alternating machine, as is also the Gordon, and on this account it is of but minor importance; for, it is quite safe to say that machines of this class will find but a limited use in the industrial development of electrical appliances. Its merit lies in the great simplicity of its armature, and consequent low cost of manufacture. The armature-wires, instead of being wound on a drum, as in the Siemens, or over a ring, as in the Gramme, are in the form of a zigzag on the face of a central disk, revolving in a magnetic field made up of a number of electro-magnets. The disposition of armature and field is shown in Fig. 2, in which the dark line represents the arma-

FIG. 1.

in Fig. 1. The carbons, A B, are forced downward by the weights, P Q, sliding upon the metallic guides, C D. The abutments, E F, are of

ture-wire, and the oval figures the field-bobins with their iron cores. One end of the armature zigzag is connected with a ring attached directly to the axle, and the other with a similar ring insulated from it. The current is taken

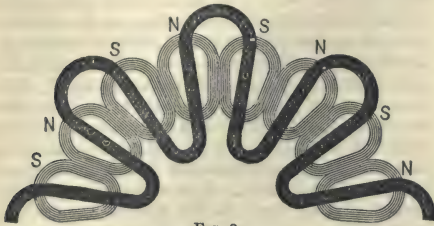


FIG. 2.

off by two rubbers. The field-magnets are excited by a small separate continuous-current machine. The machine exhibited weighed but 1,175 pounds, and yet was able to support 300 Swan lamps, stated to be giving 20 candles each, when driven at 2,000 revolutions per minute. The armature-coil weighed but 18 pounds. An armature of this form has evidently a good many advantages in practical use, one of the chief of which is its little liability of becoming overheated. Its low first cost is also a very important advantage over

production. The only novelty about it is the armature, and that is the invention of Sir William Thomson.

The Gordon machine is chiefly remarkable for being the largest dynamo yet constructed. It is designed to supply 7,000 incandescent lamps with adequate driving power, but it has so far supplied only 1,300. The machine consists essentially of a central disk carrying electro-magnets, and revolving between sets of similar electro-magnets on each side of it. The rotating portion is the field, and the stationary electro-magnets the armature. This latter contains 128 coils, 64 on each side—this being twice as many as in the rotating part. The object of this is to prevent the coils of the fixed series acting detrimentally upon each other by induction, a difficulty experienced in a former machine of Mr. Gordon's, where the coils in the moving and fixed part were equal. The coils of the revolving magnets are excited by a separate continuous-current machine, as is the field of the Ferranti. The total weight of the machine is 18 tons, that of the revolving part being seven tons. Its diameter is eight feet nine inches, and it is designed, when the machine is giving its maximum current, to be driven at 200 revolutions per minute. The tests so far made show a very high efficiency, and the alternating currents are found to work

well with the incandescent lamps. Large as this machine is, Mr. Gordon regards it as a small affair compared to what should be used in supplying lamps from a central station, he having expressed himself as desirous of constructing one with the magnet-wheel 18 feet in diameter. The engraving, Fig. 3, gives a sufficiently clear representation of this enormous dynamo to render any further description unnecessary.

The feature of the year in incandescent electric lighting was the starting into operation of the first Edison district in New York city. While other inventors have either had no decided conviction as to the best way of supplying incandescent lighting to the consumer, or have not cared to express themselves on the

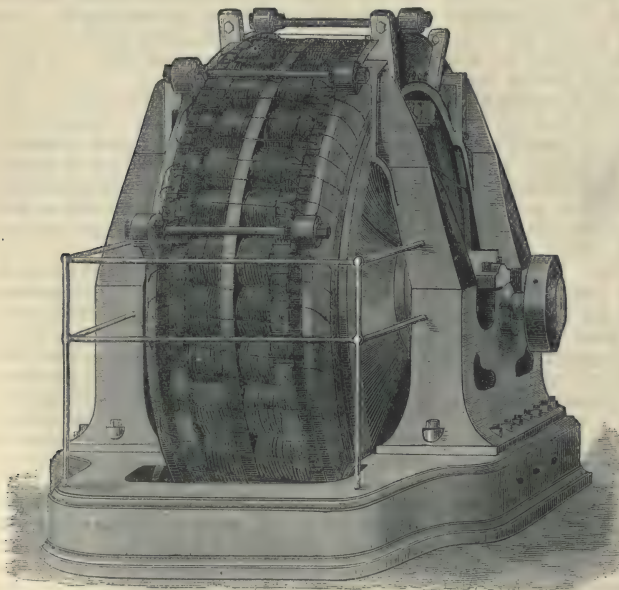


FIG. 3.

the armatures of present machines, and will secure it the preference in all those cases where an alternating-current machine is desired. The published descriptions of this machine do not indicate the part Mr. Ferranti has taken in its

matter, Mr. Edison, from the outset of his experiments, was convinced that the only practicable method was distribution direct from the machine from large central stations, without the interposition of intermediary apparatus, and



all portions of his entire electrical plant have been designed from this point of view. The system is, in many respects, analogous to that in use with gas. This latter illuminant is distributed from the works through large mains and under low pressure, suitable for direct issuance from the burner. In Mr. Edison's system the current is of low electro-motive force, 110 volts between the terminals of the machine, and is distributed through large mains laid under-ground. The lamps are arranged in what is known as multiple arc, that is, on cross-wires between the house conductors, which themselves form cross-wires to the mains. As the current passing through each lamp depends upon its resistance and the electro-motive force of the current, when this latter is maintained constant, each lamp draws its proper supply without regard to any other on the circuit. The generators at the central station are likewise arranged in multiple arc, one pole of each machine being connected with the outgoing and the other to the return main. The disposition of the machines, and the mode in which the circuits are actually arranged in practice, is shown in the diagram (Fig. 4). Each main consists of an iron tube containing two half-

at L. The large steam-dynamo, of the type used at this station, and which is to be used in all similar installations, is shown in Fig. 5. The magnetic field is produced by twelve horizontal electro-magnets, united at their farther ends by a massive heel-plate, seen at the back of the figure, and terminating in the heavy pole-pieces seen in the front of the illustration. The armature, which is a long cylinder, is composed of a core of a great number of thin sheet-iron disks, insulated from each other and fitting over a central wooden cylinder. The copper is in the form of straight bars instead of wire, in order to make the resistance as low as possible. These bars are united at alternate ends to as many disks of copper, the connection being such that the current passes along one bar, across a disk at one end, along the bar diametrically opposite the first, across a disk at the other end, then along a bar next to the first bar, and so on, the effect being the same as would be obtained by a continuous copper coil of low resistance. The diameter of the complete armature is 28 inches, its length 5 feet, and its weight over four tons. It is driven at a speed of 350 revolutions per minute. Its resistance is only .00049 ohm.

The field coils form a shunt circuit to that of the machine, and have a resistance of 21 ohms. The engine is a horizontal Porter-Allen of 130 horse-power, nominal. The entire machine, including the bed-plate, weighs over thirty tons. It has a normal capacity of 1,200 lamps of 16 candles each, but can supply 1,600 when necessary. There are at present six of these enormous dynamos in place at the central station, but the completed installation will comprise twelve of them.

The current used by each lamp is measured very simply by means of a meter, which consists of

an electrolytic cell through which a small fraction of the current passes. The cell contains sulphate of copper, which is decomposed, and the copper deposited upon one of the electrodes, the amount so deposited being an accurate measure of the current which has gone through. A meter has been designed in which the amount of copper deposited is indicated on a dial, as the gas passing is registered on a gas-meter, but the meter at present supplied to consumers is without registering apparatus, the consumption being determined by the meter-inspector by direct weighing of the electrode. This form of meter is shown in Fig. 6.

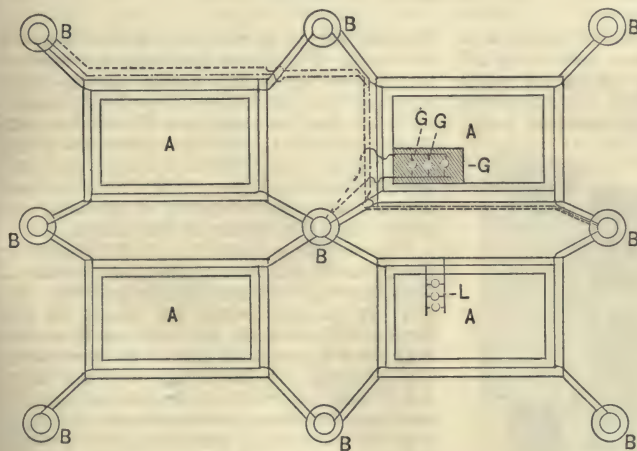


FIG. 4.

round copper conductors imbedded in a resinous insulator. A main of this kind is carried around each city block, and each one connected with those of the adjacent blocks through the boxes B, as shown. The conductors in these mains are of uniform size, but by means of the auxiliary mains, termed feeders, shown in the dotted lines, the conducting capacity is increased to any desired extent throughout any portion of the district. The system can by this means be adapted to any increase of consumers as occasion arises. The way in which the dynamos are arranged with regard to the circuit is shown at G, and the mode in which the lamps are connected with the mains shown

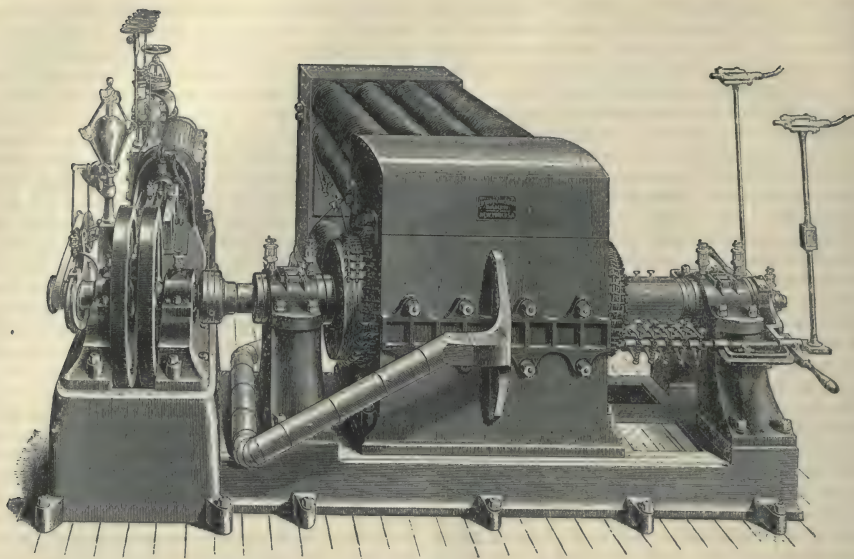


FIG. 5

The present working of the station the company regards as in every way satisfactory and fully up to its expectations. When the generators are working up to their normal power, six lamps are obtained per indicated horse-

power. This will not be so when the district is in full operation. Difficulties have been encountered in the working of this station, as was to be expected in a new undertaking of this magnitude, but they have not been of a kind so confidently insisted upon by the opponents of the incandescent light. The lamps burn with perfect steadiness, and the service is reliable, there having been no interruption of the electrical supply since the starting of the station.

The only other possible method of supplying the incandescent light upon a large scale is that involving the use of storage-batteries. By this system storage-cells are placed in the houses of consumers, and charged by a current from dynamos at one or more stations. The advantage of this method over the direct one is the smaller investment in machines and street conductors requisite, as fewer machines, working continuously, can accomplish the work, and as high-tension currents, requiring smaller conductors, can be used for charging. The commercial feasibility of this system depends upon the investment requisite for the necessary storage-batteries, both in the matter of original outlay and depreciation. Very little has as yet been made public, or is, in fact, known on these points, and hence no judgment of the value of this method can at present be formed. This system readily allows of both arc and incandescent lighting being accomplished with one set of street-conductors, which is not feasible with the direct system. The accumulators are charged during the day-time, when the arc-lamps are not burning, and the same current is then used to support the arc-lamps at night. This is the plan which the Brush Company in

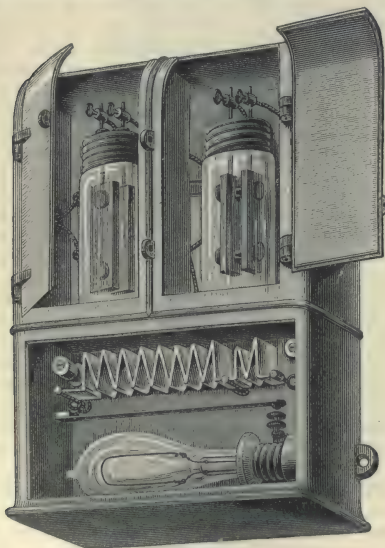


FIG. 6.

power; and while, with the installation but partially completed, the number of lamps in use at the time of minimum consumption is below the normal number of one machine,



this country propose to carry out, using for this purpose the storage-battery devised by Mr. Brush, and the Swan incandescent lamp, as indicated above. By means of an automatic device, the batteries are placed in circuit when the electro-motive force falls below a certain point, and cut out again as soon as sufficiently charged. Combined with this is a registering instrument, which indicates upon a dial the current supplied to the battery. The street-wires, for the distance which they enter a house to make connection with the battery, will be thoroughly insulated, and so placed that they can not be handled, so that the danger apprehended from allowing conductors bearing powerful high-tension currents may be thoroughly provided against. The Brush-Swan Company expects to begin putting its system into operation in the course of a few months, and its progress will be watched with great interest, as having an important bearing upon the character of future electric installations.

The other considerable arc-electric lighting company in this country, the "United States," is also proposing to adopt the storage-battery system of incandescent lighting. This company controls the Maxim incandescent lamp, which is being quite largely introduced at various points. In New York no considerable plant has yet been established, but the light is being supplied, to a limited extent, from the arc-lamp stations. It may be remarked here that the Weston arc-lamp, which is furnished by this company, differs from the other arc-lamps now on the market, in using a current of much lower electro-motive force, and nearly twice the volume. The arc is exceedingly short, being not more than one thirty-second of an inch, while that of the Brush is one sixteenth, and the Fuller three sixteenths of an inch. The light of the Weston, on this account, is free from the violet rays noticeable in lamps of longer arc, and is, therefore, more agreeable. The use of a current of such volume requires larger conductors than are necessary with a smaller current, and it can not, therefore, be operated upon long circuits as economically as those of higher electro-motive force.

Various tests have from time to time been made of both arc and incandescent lamps, as well as machines; but the first thorough and complete examination is that made on the apparatus shown at the Paris Exhibition of 1881. Including, as these did, all the chief lamps and machines now before the public, the reports, in which these tests are embodied, are comprehensive and authoritative statements of the commercial value of the present electric-lighting apparatus.

The main committee consisted of MM. Allard, Joubert, T. Le Blanc, Pottier, and H. Tresca. The results obtained by these experts were communicated to the "Académie des Sciences" in four papers bearing the titles:

1. Continuous-current machines and regulators.
2. Alternating-current machines.
3. Electric candles.
4. Incandescent lamps.

Besides this committee, a sub-committee was appointed, specially charged with the examination of incandescent lamps. As the report of this latter committee on incandescent lamps is much fuller than that of the chief one, it is alone reproduced here, and the report of the main committee confined to the first three of the above items.

The unit of power adopted by the committee is the *cheval-vapeur*, which is equal to 75 kilogrammetres, or 542½ foot-pounds per second. This is slightly less than the English horse-power, which is 550 foot-pounds per second.

The luminous intensity is expressed in carcels—equal to 9½ standard candles—and the results of the measurements in various directions are averaged so as to make the intensity the same in every direction, that is, at every point on the surface of a sphere of which the arc is the center. Even when measured in the best direction the results obtained by the committee are much under those stated by the various manufacturers, while the average spherical intensity is very much less. The table on page 274 gives the results with continuous-current machines and regulator lamps.

An examination of this table shows that machines transform on an average 85 per cent of the work expended on them into electrical energy, and of this electrical energy from 50 to 77 per cent appears in the arc, and that for each horse-power of energy expended in the arc there are obtained—

120 carcels, in lights of 800 to 1,000 carcels.	
100 " " " " 250 " "	
71 " " " " 40 " "	

The experiments upon alternating-current machines and lamps were made with the machines of De Meritens and Siemens, and with the Serrin, Berjot and Siemens lamps. In one case a Serrin light-house lamp was operated by a De Meritens machine, giving a light the mean spherical intensity of which was equal to 931 carcels, with an expenditure of mechanical power of 11.7 horse-power. This was equivalent to 79.6 carcels per mechanical horse-power, while but 60 carcels were obtained with lights of the same power operated with continuous currents. The superiority of the alternating current shown in this particular case was not, however, maintained in lights of lower candle-power, as the result fell to 59.7 carcels in the Berjot lamps of 150 carcels (arranged in a series of five), and to 33.3 carcels in the Siemens differential lamps of 39 carcels (12 in three circuits).

The candles examined were those of Debrun, Jablochhoff, and Jamin. The Jablochhoff candle showed from 46 to 51 carcels per arc horse-power, and from 31 to 35 carcels per mechanical horse-power, while that of Debrun, the experi-

## CONTINUOUS-CURRENT GENERATORS AND LAMPS.

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
	Gramme. 1 lamp.	Juryen. 1 lamp.	Maxim. 1 lamp.	Siemens. 1 lamp.	Siemens. 2 lamps.	Burgin. 3 lamps.	Gramme. 3 lamps.	Gramme. 5 lamps.	Siemens. 5 lamps.	Weston. 10 lamps.	Brush. 10 lamps.	Brush. 40 lamps.	Brush. 38 lamps.
1. MECHANICAL OBSERVATIONS.													
Speed of generators, revolutions per minute .....	475	800	1017	737	1330	1535	1495	1496	896	1003	770	700	705
Effective work of motor, horse-power .....	16.13	21.68	4.07	4.44	5.31	5.82	8.11	8.00	5.05	13.01	13.39	20.96	33.25
2. ELECTRICAL OBSERVATIONS.													
Resistance of generator, ohms .....	.38	.45	.70	.66	1.63	2.80	.62	4.57	7.05	1.88	10.55	22.38	22.38
" " unit without lamps, ohms .....	.10	.62	.25	.12	.13	1.50	1.25	.62	4.50	1.50	9.56	2.60	7.90
Total resistance, ohms .....	.48	.127	.95	.73	1.81	4.30	1.77	5.19	11.55	3.38	18.11	24.98	30.28
Intensity of current, amperes .....	109.2	83	88	85	26.2	18.5	19.0	15.8	10.00	9.3	10	9.5	9.05
Fall of potential at lamps, volts .....	53	53	53	53	44.5	41	53	49.8	47.4	32	44.3	44.3	44.3
Work in total circuit .....	6.97	13.99	1.41	1.29	1.69	2.00	.87	1.65	1.57	2.43	1.79	8.07	8.72
" " one lamp .....	7.87	7.09	2.37	2.32	1.59	1.927	1.969	1.04	.64	1.00	.60	.578	.578
" " all lamps, horse-power .....	7.87	6.97	9.31	9.52	8.18	8.08	4.11	5.20	8.20	10.00	9.60	21.88	20.79
Total electrical work .....	14.84	20.66	9.72	9.81	4.87	5.08	4.98	6.55	4.77	19.43	11.89	24.65	24.51
Mean electro-motive force .....	102	172	84	80	136	203	193	328	333	333	340	2009	1911
3. PHOTOMETRIC OBSERVATIONS.													
Diameter of carbons, inches .....	.79	.91	.43	.71	.85	.51	.55	.47	.39	.35 & .39	.43	.43	.43
Horizontal luminous intensity, carrels .....	952	607	246	210	142	50	135	132	67	32	31	68	68
Horizontal luminous intensity, maximum carrels .....	1962	1262	435	371	297	227	357	374	174	134	87	187	187
Average spherical luminous intensity .....	966	688	239	206	207	147	197	192	52	38	33	89	89
Average total intensity .....	966	688	239	206	410	246	591	510	260	860	603	1500	1433.
4. PERFORMANCES.													
Total mechanical work .....	.92	.97	.91	.86	.92	.95	.62	.86	.94	.95	.85	.83	.73
Mechanical work in arc .....	.45	.32	.57	.57	.60	.58	.51	.65	.63	.77	.72	.73	.62
Efficiency of arc .....	.53	.33	.62	.66	.65	.61	.83	.76	.67	.80	.84	.87	.85
Carrels per mechanical horse-power .....	60	21.7	58.7	68.9	77.2	46.2	61.8	63.8	51.5	65.3	45.4	52.1	44.4
" " electric horse-power .....	65.1	32.8	64.2	80.3	84.2	48.4	100.4	74.5	54.6	69.4	53.4	62.6	60.5
" " arc horse power .....	123.8	98.7	103.5	121.4	129.3	79.9	121.6	98.1	81.3	85.0	63.3	71.7	71.4
" " ampère .....	8.85	7.64	7.24	8.74	7.62	4.43	8.79	6.67	5.20	3.70	3.80	4.11	4.11



ments on which were very incomplete, gave but 32 carrels in the former and 14 in the latter case.

The following is the complete report of the sub-committee on incandescent lamps, with the exception of the detailed statement of the performance of each lamp, which is omitted, as not essential to a full understanding of the results obtained:

**I. DESCRIPTION OF THE LAMPS.**—The only lamps in the exhibition which were purely incandescent in character were those of Edison and Maxim, in the United States Section, and those of Swan and Lane-Fox, in that of Great Britain. The idea represented in these lamps is essentially the same in all of them, the differences being, for the most part, details of construction. They all consist of a glass envelope more or less spherical in form, in which is inclosed a carbon loop, made of carbonized organic material, and supported upon wires of platinum sealed into the glass. The space in the interior of the lamp is very perfectly exhausted.

**A. The Edison Lamp.**—The Edison lamp is pear-shaped in form. The carbon filament is long and fine, and is bent into the shape of a U. It is made from Japanese bamboo, cut to the requisite size in a gauge. In section it is nearly square, being about 0.3 millimetre on a side, the ends being left considerably wider. The fiber is carbonized in molds of nickel, and is attached to the conducting wires by copper, electrolytically deposited upon them.

**B. The Swan Lamp.**—The Swan lamp is globular in form, the neck being quite long. The carbon filament is made from cotton-thread parchmented before carbonization by treatment with strong sulphuric acid. The ends of this filament are very much thickened, and the loop has a double turn at the top. Its ends are clamped in a pair of metal holders, supported laterally by a stem of glass which rises through the neck to the base of the globe. Below, these holders are fastened to wires of platinum which pass through the glass.

**C. The Maxim Lamp.**—The Maxim lamp is also globular in form, but it has a short neck. Within the neck rises a hollow cylinder of glass, supporting upon its summit a column of blue enamel, through which pass the conducting wires of platinum which carry the carbon. The filament is made from card-board cut by a punch into the form of an M. In section, therefore, it is rectangular, and several times as broad as it is thick. It is carbonized in a mold through which a current of coal-gas is passed. After carbonization, the filament is placed in an attenuated atmosphere of hydrocarbon-vapor and heated by the current. The vapor is decomposed, and its carbon is precipitated upon the filament. In this way not only are inequalities obliterated, but the resistance of the filaments may be equalized, and brought to any standard required.

**D. The Lane-Fox Lamp.**—The Lane-Fox lamp is ovoid in shape, the neck being in length

intermediate between the two lamps last described. The carbon is in the form of a horse-shoe, and is circular in cross-section. It is made from the root of an Italian grass, largely used in France for making brooms. After carbonization, the filaments are classified according to their resistances. They are then heated in an atmosphere of coal-gas, by which carbon is deposited upon them, as in the filaments of the lamps last described. The filament in the lamp is supported by platinum wires, to which it is attached by sleeves of carbon encircling both. These wires pass through tubes in the top of a hollow glass stem. Just below the extremities of these tubes are two small bulbs containing mercury, forming the contact between the platinum wire sealed into the glass above and the copper conductor which enters from below. These conductors are held in place by plaster which fills the base of the lamp.

**II. METHODS OF MEASUREMENT.**—The question to be determined was simply the efficiency of these lamps. The efficiency of a lamp is the ratio of energy produced to energy consumed, i. e., the quantity of light given by the lamp for each horse-power of current which it consumes. The data required to calculate this efficiency may be obtained when the electromotive force of the current, the resistance of the lamp when giving its light, and its illuminating power have been determined.

**1. Electro-motive Force.**—The electro-motive force, or fall of potential through the lamp, was measured by Laws's method. A suitable condenser was charged by being put in communication with a standard Daniell cell, and then discharged through a high-resistance galvanometer, the deflection of the needle being noted. This condenser was then connected to the two wires of the lamp, and again discharged through the galvanometer, the deflection being made the same as before by means of a variable shunt connected with the galvanometer. Since with a given condenser the charges it receives are proportional to the potentials of the charging currents, and since the discharge deflections of a galvanometer represent the quantity of these charges, it follows that the electro-motive forces are proportional to these discharge deflections. If, however, as in the present case, the discharge deflections are made equal by means of shunts, then the electro-motive forces are proportional to the multiplying power of the shunts.

**2. Resistance.**—The resistance of the lamp, when giving its light, was obtained by making the lamp one side of a Wheatstone's bridge through which the main current was flowing. The second and fourth sides were formed of fixed resistances of known value, and the third side of an adjustable resistance. When the bridge is balanced, the product of the two fixed resistances, divided by the adjusted resistance, gives the resistance of the lamp at the given candle-power.

3. *Illuminating Power*.—The illuminating power of the lamp was measured on a Bunsen photometer. At one end of the bar was the lamp itself; at the other end two standard candles, placed nearly in line. The plane of the carbon filament was placed at  $45^\circ$  to the length of the bar, and each lamp was measured at 16 and 32 candles.

III. APPARATUS EMPLOYED. 1. *Condenser*.—The condenser used in these measurements had a capacity of 1 microfarad, divided into sections of 0.4, 0.3, 0.2, and 0.1. The dielectric was paraffined mica, and the brass-work was supported on ebonite pillars.

2. *Galvanometer*.—The galvanometer was a Thomson double-coil astatic instrument, inclosed in a square case with glass sides. Measured resistance, 6,550 ohms. Used with lamp-stand and scale, in the ordinary way.

3. *Standard Cell*.—An ordinary Daniell cell, the copper plate being immersed in a saturated solution of pure copper sulphate, contained in the porous cell, and the zinc plate amalgamated, in a saturated solution of pure zinc sulphate, in the outer jar; one of a battery of ten cells forming a part of the Edison exhibit.

4. *Resistance Coils*.—A set of standard coils, measuring from 1 ohm to 5,000 ohms. All other resistances employed were standardized by these. A set of coils used in the Wheatstone's bridge. Compared carefully with set.

5. *Wheatstone's Bridge*.—Four conducting wires of large size arranged on the table in the form of a rhomb. A test galvanometer was inserted between the obtuse angles of the rhomb, and a pair of shunt wires from the main conductors were attached at the acute angles. The first side of the rhomb contained the lamp to be measured, standing in its place on the photometer. The second side contained a fixed resistance of 5 ohms. The third side contained a variable resistance, and the fourth side a fixed resistance of 950 ohms.

6. *Photometer*.—The photometer employed was of the Bunsen form, having a double bar, eighty inches long, graduated in inches and in candles. The disk was of paraffined paper, with a plain spot in the center. The disk-box was movable on rollers, and contained inclined mirrors to facilitate the adjustment. The candles used were of spermaceti, made to burn 120 grains (7.776 grammes) per hour. The entire apparatus was surrounded with heavy black cloth.

7. *Dynamo-electric Machine*.—An Edison sixty-light machine was used to furnish the current required. In this machine the field-magnets, which are very long and heavy, stand vertically. The field is maintained by a shunt current, regulated by an adjustable resistance in its circuit. The bobbin is wound on a cylinder like that of Siemens, from which it differs, however, in its details. Its resistance was only 0.03 ohm, and the current delivered, at a speed of 900 revolutions, had an electro-motive force of 110 volts.

IV. RESISTANCE OF LAMPS COLD.—The resistance of the lamps cold was measured on a Wheatstone's bridge of the ordinary form and in the usual way. Twenty-four of each were taken (except the Lane-Fox, of which only fifteen were furnished), and ten selected from these for the tests.

V. METHODS OF CALCULATION. 1. *Illuminating Power*.—The standard candle should burn 7.776 grammes spermaceti per hour, or 0.1296 gramme per minute. The two candles used should burn 0.2592 gramme per minute. The corrected candle-power of the lamp, therefore, is obtained by the proportion: As 0.2592 is to the amount actually burned per minute, so is the observed candle-power to the corrected candle-power.

2. *Resistance (hot)*.—From the theory of the Wheatstone bridge, the resistance of either side is equal to the product of the adjacent sides divided by the opposite side. In the bridge used for the measurement, the resistances in the two adjacent sides were 950 and 5 ohms. Hence, by dividing their product, 4,750, by the reading of the variable resistance observed, the resistance of the lamp hot is obtained.

3. *Electro-motive Force*.—In Laws's method the electro-motive forces are proportional to the multiplying power of the shunts employed. Since with the Daniell cell no shunt was used, the multiplying power of the shunt used with the lamp-current represented directly the electro-motive force through the lamp, in terms of the standard cell. The multiplying power of a shunt is the sum of the galvanometer resistance and the shunt resistance divided by the shunt resistance. In this case the resistance of the galvanometer was 6,550 ohms. Hence, if  $S$  represent the resistance of the shunt, obtained by experiment—

$$\frac{6550 + S}{S}$$

will represent the electro-motive force. Since the electro-motive force of a Daniell cell is not 1 volt, as here assumed, but 1.079 volt, strict accuracy would require the figures given to be increased in that ratio. Moreover, the small error arising from the inductive action of the needle on the galvanometer coils has been regarded as unimportant.

4. *Current*.—By the law of Ohm the current strength is the quotient of electro-motive force by resistance. Dividing the electro-motive force in volts by the resistance in ohms, the current strength is obtained in amperes.

5. *Electrical Energy*.—The work done by a current is proportional to the product of the square of the current strength into the resistance of the circuit. Or, since the electro-motive force is equal to the product of the current strength by the resistance, the energy is represented by the product of the electro-motive force in volts by the current strength in amperes. This gives the energy in volt-amperes.



6. *Mechanical Energy.*—Since an absolute unit of work is done per second by an absolute unit of electro-motive force in a circuit of one absolute unit of resistance, 1 volt-ampère represents 10<sup>7</sup> absolute units of mechanical work per second, or 0.10192 kilogramme-metres. By multiplying the volt-ampères by 0.10192, the product is the mechanical work done in the lamp in kilogramme-metres.

7. *Lamps per Horse-power of Current.\**—One horse-power is 75 kilogramme-metres per second. By dividing 75, therefore, by the number of kilogramme-metres of work done in the lamp per second, the quotient is the number of such lamps maintained by a horse-power of current.

8. *Candles per Horse-power of Current.*—The number of candle-lights per horse-power of current is obtained, of course, by multiplying the number of lamps per horse-power of current by the corrected candle-power of each.

9. *Normal Lamps per Horse-power of Current.*—Conversely, by dividing the number of candles per horse-power of current by the normal value of the lamp in standard candles (in the present case 16 or 32), the number of normal lamps per horse-power of current is obtained.

## SUMMARY OF RESULTS.

## (a.) At 16 Candles.

	Edison.	Swan.	Lane-Fox.	Maxim.
Candles.....	15.38	16.61	16.36	15.96
Ohms.....	187.4	32.75	27.40	41.11
Volts.....	88.11	47.30	43.63	56.49
Ampères.....	0.651	1.471	1.593	1.380
Volt-ampères.....	57.93	69.24	69.53	75.05
Kilogramme-metres.....	5.911	7.059	7.039	7.939
Lamps per horse-power.....	12.73	10.71	10.61	9.43
Candles per horse-power.....	196.4	177.92	173.53	151.27
Lamps of 16 candles per horse-power.....	12.28	11.12	10.85	9.45

## (b.) At 32 Candles.

	Edison.	Swan.	Lane-Fox.	Maxim.
Candles.....	31.11	33.21	32.71	31.93
Ohms.....	180.03	31.75	26.59	39.60
Volts.....	93.39	54.21	48.52	62.27
Ampères.....	0.7535	1.758	1.815	1.575
Volt-ampères.....	74.62	94.83	87.65	98.41
Kilogramme-metres.....	7.604	9.67	8.936	10.03
Lamps per horse-power.....	9.88	7.90	8.47	7.50
Candles per horse-power.....	307.25	262.49	276.59	289.41
Lamps of 32 candles per horse-power.....	9.60	8.20	8.65	7.48

VI. CONCLUSIONS.—The following conclusions seem to be sustained by the results which have now been given:

1. The maximum efficiency of incandescent lamps in the present state of the subject, and within the experimental limits of this investigation, can not be assumed to exceed 300 candle-lights per horse-power of current.

\* This is the French horse-power, *cheval-vapeur* = 542½ foot-pounds per second, as stated above, instead of 550 foot-pounds.

2. The economy of all lamps of this kind is greater at high than at low incandescence.

3. The economy of light-production is greater in high-resistance lamps than in those of low resistance, thus agreeing with the economy of distribution.

4. The relative efficiency of the four lamps examined, expressed in carcel-burners of 7.4 spermaceti-candles each, produced by one horse-power of current, is as follows: (A.) At 16 candles: Edison, 26.5; Swan, 24; Lane-Fox, 23.5; and Maxim, 20.4. (B.) At 32 candles: Edison, 41.5; Lane-Fox, 37.4; Swan, 35.5; and Maxim, 32.4. To double the light given by these lamps the current-energy was increased, for the Maxim and Lane-Fox lamps, 26 per cent; for the Edison lamp, 28 per cent; and for the Swan lamp, 37 per cent.

EMERSON, RALPH WALDO. Born in Boston, Mass., May 25, 1803. His father, William Emerson, was pastor of the First (Unitarian) Church in that city, and his grandfather also was a preacher. In his eighth year, on the death of his father, he was sent to the Grammar School, and was fitted for college at the Boston Latin School. He entered Harvard College in 1817, in his fourteenth year, and was graduated in 1821, having had among his instructors Edward Everett, George Ticknor, and Caleb Cushing. He was not at all distinguished as a student, though he succeeded in carrying off prizes for dissertations and declamation, and was noted as a frequenter of the library and for knowledge of general literature. He was also the poet of his class on "class-day." The five years following his graduation were spent in teaching school.

As it was expected that Emerson should follow the family tendency to preaching, he studied divinity, chiefly under Channing, and was "approved to preach," in 1826, by the Middlesex Association of Ministers; but, owing to general debility, he did not enter upon public work for some time. In March, 1829, he was ordained as colleague of Henry Ware, at the Second (Unitarian) Church of Boston, and in a year's time became sole pastor. This kind of labor, however, does not appear to have been quite congenial, and as his peculiar cast of mind led him to entertain and express grave doubts as to the sacrament of the Lord's Supper being a permanent institution, or of any value to any one in these latter days, he first brought the subject before his congregation, and urged substitution of some other rite of commemoration; and when the people to a man refused to adopt his views, he quietly resigned, in 1832, and retired from any further connection with public preaching. Thenceforward he turned his attention largely to giving lectures, and writing in both poetry and prose. He traveled in Italy, France, and England, for a year. While in England he visited Wordsworth, Coleridge, and Carlyle, with the last of whom he formed a close friendship, despite Carlyle's cynicism and fixed habit of abusing his fellow-men, which was in marked

contrast with his own tolerant and fair-minded temper.

On Emerson's return home, in the winter of 1833-'34, he began his career as a public lecturer in the Boston Mechanics' Institute, taking "Water" as his first subject. Three others followed, two on Italy, and the last on "The Relation of Man to the Globe." In 1834 he delivered a series of biographical lectures on Michael Angelo, Milton, Luther, George Fox, and Burke, the first two of which were afterwards published in the "North American Review." In the same year, also, he read a poem at Cambridge before the Phi Beta Kappa Society. The year following he was married for the second time—his first wife having died, of consumption, in 1832—and took up his residence in the "Old Manse," in the quiet little village of Concord, twenty miles from Boston, where he had his home until his death.

From this time onward, for some thirty to forty years, Emerson continued to give courses of lectures, year after year, on such topics as "English History," "The Philosophy of History," "Human Culture," "Human Life," "The Present Age," "The Times," etc. These lectures were delivered in all parts of the United States, and he always secured good attendance. In 1848, on a second visit to Europe, he lectured in England and Scotland. He was well received, and had large audiences; but how much of his reputation grew out of his peculiar way of presenting and discussing important subjects, it is not easy to say. One further visit was made to the Old World in 1872, when he was accompanied by his daughter, and renewed the intercourse of twenty years before with Carlyle and other friends and admirers in England. Subsequent to this there are few events in Emerson's life on record. On March 30, 1878, he spoke in the Old South Church on "The Fortune of the Republic," and in 1880 gave his hundredth lecture before the Concord Lyceum, on "New England Life and Letters."

Emerson died at his residence, in Concord, on the evening of April 27, 1882, without a stain upon his character as a man and a citizen, and esteemed by all his neighbors, and those who knew him best in these relations. In other respects, however, looked at as a philosopher, a guide, a poet, it is somewhat difficult to estimate aright his true position and rank. Some are as extravagant in laudation as others are in contempt and scorn. One set of men exclaim that there never was, and never will be again, such a philosopher, such a writer, such a poet, such a sage, before whose transcendent brilliancy and profundity all the fires of ancient and modern wise men and teachers pale into almost nothingness. Another set, angered at the difficulty of finding any sense or meaning in many of his writings, cast them all aside as little better than gibberish—as words, words, without being anything else; as a profundity of nonsense and supposed wis-

dom, without any reality. Doubtless both extremes are to be avoided, and a fairer estimate sought somewhere between them. The Boston "Transcendental Club," of which Emerson was a member, in company with George Ripley, Theodore Parker, Margaret Fuller, and other kindred spirits, set out to do great things through its organ, "The Dial," and its remarkable attempt to carry out a fantastic theory of living together, in the "Brook Farm" community (1841). Emerson was a chief contributor, and for most of the four years of its existence editor, of "The Dial"; but he had common sense enough to see that æsthetic villages were not among the possibilities for the human family. Emerson's aim in the journal just named, as, indeed, in all his lectures and writings, was to be a teacher of his fellow-men; and it may be regarded as certain that he has largely influenced the minds of a select, appreciative few. He possessed imagination, wit, and a keen sense of beauty; but his style of writing and expressing himself is by no means always clear and pleasing. In his poetry, though he sometimes fully vindicates his claim to be a true bard, he is frequently as inartistic and harsh as the merest pretender to the divine faculty. There are many who doubt altogether the value of New England transcendentalism, and these will probably never be brought to acknowledge any special merit in Emerson or his writings. Others, whose proclivities lie in that direction, will, on the contrary, turn to the Sage of Concord, and will diligently study and feed upon the pabulum which Emerson's contributions to both poetry and prose afford. Possibly Emerson will be a power in the future, as in the past, and his admirers confidently predict that his fame will endure while the world lasts.

The works of Ralph Waldo Emerson are published by Houghton, Mifflin & Co. in various editions. The "Fireside Edition," in five volumes, 16mo, is a very neat and commodious one (1883). Vol. I contains the "Essays," first and second series (1841-'44). Vol. II contains "Representative Men," being essays on Plato, Shakespeare, Goethe, and others (1850), and "Society and Solitude" (1870). Vol. III contains "English Traits," being studies of English life and character (1856), and "The Conduct of Life" (1860). Vol. IV contains "Letters and Social Aims" (1876), and "Poems" (1876), being his last revision and selection of his poetical works. Vol. V contains "Miscellanies, embracing Nature, Addresses, and Lectures" (1836-'44). To these is to be added "Parnassus," a volume of "Choice Poems, selected from the Whole Range of English Literature, edited by Ralph Waldo Emerson, with a Prefatory Essay."

ENGINEERING. The year 1882 saw the final completion of the St. Gothard Tunnel, a work of engineering so important as to mark an epoch in the progress of civilization, but which the narrow jealousies and chicaneries of



European diplomacy delayed for twenty years. The same year witnessed the indefinite postponement, from political motives equally false and retrograde, of another work of even bolder design, and of scarcely less importance to civilization, which engineering art stands ready to execute. (See ENGLISH CHANNEL TUNNEL PANIC.)

Among the ship-canals under discussion are one from Bordeaux to Narbonne to join the Atlantic and Mediterranean, one to connect the North Sea and the Baltic, the Nicaragua maritime canal, one through the Isthmus of Kraw, and the recently projected Manchester ship-canal. The protests of De Lesseps against the violation of the Suez Canal by the British army led to the discussion of a new canal between the Mediterranean and the Red Sea. As the concession to the Suez Company conveys the exclusive right to the isthmus route, the construction of a ship-canal from Alexandria to Suez by way of Cairo was proposed. The Suez Canal is insufficient for the present traffic, and will have to be enlarged if a second canal is not constructed. The proposed canal through the Delta would be of great value to the irrigation system of Egypt, as it would be a sweet-water canal, fed from the Nile. The quantity of material to be excavated would be about 160,000,000 cubic yards, or double the quantity removed in the construction of the Suez Canal. The drainage-canals constructed by Ismail Pasha in the first ten years of his reign involved an equal amount of excavation. To efficiently irrigate the lands of the Delta it is found that about an average of seven tons of water per day are required for every acre. This, for the total area of 3,000,000 acres, would call for a constant supply of 250 tons per second, which is five sixths of the discharge of the river at lowest Nile. The Menoufieh and the Behera Canals are capacious enough to convey the whole quantity of water needed, but they carry off together not more than seventeen tons of water per second when the river is at its lowest stage. The present drainage system is constructed so as to keep the water stored in reservoirs formed by sluices in the canals. The removal of the sediment which settles in these reservoirs involves an enormous amount of labor. The proposed canal to Cairo and Suez would be able to supply the entire 250 tons per second without interfering with its function as a ship-canal. Half the surface of the Delta could be directly irrigated from the canal, and the other half, comprising the lands between the Rosetta and Damietta branches, could be supplied by means of large siphons or by reconstructing the *barage* of Mehemet Ali.

The final surveys for the Panama Canal have been completed, and the work is advancing at Colon, Gorgona, Bas-Obispo, Emperador, Cu-lebra, and Paraiso. Very heavy dredgers have been brought from Philadelphia, and a large quantity of other machinery will be employed.

As the work progresses the belief is confirmed that less rock excavation will be necessary than was calculated.

Rapid progress has been made on the Isthmus of Corinth Canal. The material to be excavated is alluvial earth, so that about 800,000 cubic yards can be removed per month by the aid of the Priestman excavating machine and with dredgers. The total amount of excavation to be done is estimated at 13,000,000 cubic yards, 1,000,000 of which is dredging, 1,700,000 mixed earth and rock, and 1,000,000 rock below water.

The important Sirhind drainage-canal in the Punjab, in British India, was completed within the year. The canal is 500 miles in length. It has subsidiary trenches of about 5,000 miles in aggregate length. It draws its water from the Sutlej, and distributes it over 750,000 acres of land.

The docks at Milford Haven, in South Wales, are nearly completed. A fleet of fast mail-steamships has been projected in the United States, which will make the voyage from New York to Milford in six days, and there connect with a special train to London, on the Great Western Railway. Milford Haven is the finest natural harbor in England, being the largest, the most sheltered, and the easiest of access; yet, since it was deserted by the Royal Navy-Yard and the Irish Steamship Line, it has had no commerce until it was taken hold of by the company which has been improving its harbor facilities and railroad connections for the last six or seven years. Vessels need no pilot, as the entrance is nearly two miles wide. The harbor is virtually landlocked, and has a minimum depth of eight fathoms. The new docks have an area of sixty acres. The entrance-lock is 500 feet long by 70 wide. The graving dock, which can also be used as a wet dock, is 710 feet in length and 96 in width. There is a small graving dock 270 by 46 feet. The depth over the sills at high water in the spring-tide is 36 feet, in the neap-tide 27 feet. The docks were made by closing the mouth of a creek with a wall and caissons, and dredging out the inclosed area. There are two locks to the dock, so that a vessel can be put upon the dry dock immediately upon coming in from sea. Both ends of the great dock and the entrance to the graving dock are closed by caissons of novel design. The end of the graving dock which opens into the wet dock, is shut by a floating caisson of the common type. The new caissons rise, when the water is removed from the flotation chambers, about nine inches above the floor between the sills, and pass into lateral chambers, their motion being controlled by a valve which closes a culvert, and by rollers on top running on girders extended over the receiving chambers. The weights of the lock are 250 tons, and those of the graving dock 300 and 400 tons respectively. To remove the salt water from the large caisson which was used in putting in the sill of the graving dock at every

ebb-tide, seven powerful pulsometer pumps were employed. The length of the quay is 2,283 yards. Coal can be obtained at Milford 30 per cent cheaper than at Liverpool.

The preliminary surveys for the proposed reclamation of the Zuyder Zee have been finished. A dike about twenty-four and a half miles in length will be constructed of sand and faced with clay, reaching sixteen feet above the level of the sea, or about six and a half feet above the highest tide. The thickness of the dike will enable it to resist the heaviest seas. The calculation is to have it completed in from seven to ten years, at a cost of \$46,000,000.

The Belgian Government and the municipality of Antwerp have arranged for a considerable enlargement of the harbor, to meet the demands of the increasing commerce of that port. The excellence of the facilities for transshipment gives this port the advantage over all others on the west coast of the Continent. The harbor has always a depth of twenty-five feet of water. Its connection with internal navigation and with the railroad lines, over which it enjoys favorable tariffs, and the absence of vexatious formalities, have drawn to Antwerp a commerce which now reaches 5,600,000 tons a year. Since the opening of the St. Gothard Railway it commands the great freight movement between the North Sea and the Mediterranean. The harbor consisted already of seven basins, with a total area of one hundred acres, and two and a half miles of quays. The new works consist in the widening and deepening of the channel of the river Escaut and the construction of an additional basin. The contracts were awarded to Couvreux and Hersent. Their amount is 38,000,000 francs. The river will be dredged to a uniform depth of twenty-five feet and a width of three hundred and eighty-two yards. A quay is being extended along the entire river front of the city, two and a half miles, one eighth of which only was already built. The sea-wall of the mole is continued in a dike above, to conserve the rectified channel. The new basin is ten acres in area, and gives six thousand feet of wharfage. The great wall, built on foundations sunk from eight to sixteen feet, is thirty feet broad at the base, one tenth narrower at the top, and of an average height of forty-eight feet. Caissons are sunk for the foundations. They are about eighty feet in length. To the top of the caisson a movable iron bell, of the same form, and some forty-five feet high, is fitted, within which the masonry is built up to the surface of the water. The bell, which weighs about two hundred tons, is floated into position, hung in a scaffolding supported by two barges. It is lowered by a system of jack-screws, very delicately adjusted, which are actuated by a steam-engine. The same engine works the pumps which fill the caisson with compressed air, and furnishes power also for bringing the materials and the mortar on cranes into the bell. The iron bell

is first floated to the spot when a fresh section of the wall is to be constructed. The bottom is a couple of feet above the level of the water. When the pontoons are firmly anchored, the caisson is floated under the bell and fitted to it, the joint being closed with India-rubber. A layer of *béton* is laid on top of the caisson, and the masonry is commenced on this. When the caisson touches ground at low tide, it is allowed to sink into place by withdrawing the pressure. If it does not settle squarely, men descend into the air-chamber, and excavate from the river-bottom until it assumes an upright position. When the caisson is enough charged to prevent its swaying at high tide, the water and silt are again removed from the working-chamber. *Béton* is poured into the chamber through four wells furnished with air-locks. When the masonry is carried up to the level of the water, the four flumes are withdrawn with the bell, and the holes are filled in with *béton*. The mole is one hundred yards from the former bank, and the space between is filled in with earth.

The St. Gothard Tunnel was opened to traffic in May. It was the most costly of the Alpine tunnels (see ALPS, TUNNELS OF THE), the cost of construction having amounted altogether to 227,000,000 francs, or \$44,000,000. It is, however, the straightest and shortest route over the Alps, and must receive the commerce of the whole Rhine Valley and all the adjacent region of Western Germany, of a large section of Eastern France and of the ports of Holland and Belgium, and the Mediterranean trade of the North of Europe. It will make Genoa an outpost for German commerce in the Mediterranean in the same manner as the Brenner and Semmering Railroads made Venice and Trieste German ports on the Adriatic. This, the most important of the five Alpine railroad routes, would have been completed long before, if international jealousies and the rivalries of the Swiss cantons had not stood in the way. The road was talked about before 1848, but it was only after the consolidation of Italy and the establishment of the North German Bund that the interests of those two nations prompted them to take up the scheme in earnest. There was a conference held at Bern in 1869, in which Switzerland, the North German League, Italy, Baden, and Württemberg took part. The rival interests of Austria could be disregarded after her defeat at Sadowa, but the French Emperor would have forbidden the construction of a line which would break up the monopoly of the Mont Cenis route if a more convenient pretext for the war with Germany had not presented itself. The Swiss cantons were brought to the verge of civil war by disputes over their rival claims. Bismarck overcame their dissensions and the French and Austrian opposition, while Cavour pledged Italy to the payment of more than half the cost. Within ten years after the work was commenced the railroad was in operation. The Semmering and Bren-



nor roads cross the chain at comparatively low altitudes and their tunnels are much shorter. The fifteen tunnels of the Semmering aggregate together 4,469 metres, and of the twenty-seven tunnels of the Brenner, the largest is only 885 metres. The Mont Cenis Tunnel is 12,233 metres. The St. Gothard Tunnel is 14,944 metres in length, and besides the main tunnel there are fifty-three others, making altogether 40,718 metres of tunneling.

The French, as stated in another place, are considering the project of a new railroad connection with Italy, either through the Simplon, Mont Blanc, or Little St. Bernard, in order to retain the through French traffic which the St. Gothard Railroad threatens to take away. The Government engineers reported in favor of the Mont Blanc route, the ground of their preference being that the mouth of the tunnel would be in French territory, while by the Simplon route it would be necessary to use Swiss railways for 127 miles, and that it would preserve to Marseilles its Swiss trade, which would otherwise go to Genoa. The Simplon route does not present the same engineering difficulties as Mont Blanc, but still it would require sixty miles of mountain railway and a tunnel twelve and a half miles long, exceeding by more than three miles the great St. Gothard Tunnel. The highest elevation would be 2,205 feet, which is much lower than that of the St. Gothard (3,693 feet), the Mont Cenis (4,043), or the Arlberg Tunnel (4,102); but the difficulty of cooling the tunnel would be so much the greater. The temperature in the St. Gothard Tunnel is 31° Centigrade, and under the Simplon would be three or four degrees hotter. Calculations as to the temperature of the projected tunnel under Mont Blanc indicate a temperature of 55° Centigrade for the distance of two miles, but there are better facilities for ventilation than in the St. Gothard Tunnel, since, for the distance of about three miles, ventilation-shafts 640 feet deep will connect it with the outer air. The Mont Blanc railway would involve the outlay of about 179,000,000 francs, and the one over the Simplon would cost 145,000,000 francs.

The Arlberg Tunnel, to connect Switzerland with the Austrian railway system, which was begun in June, 1880, will be 6.382 miles long. The summit-level, 4,998 feet above the Adriatic, is 2.611 miles from the eastern extremity. The Ferroux machine, which was employed in the St. Gothard Tunnel, is used at the eastern end, and the Brandt machine, which was tried with good results in the St. Gothard works, is employed at the other end. The latter was guaranteed by the inventor to advance six feet four inches a day. Its performance greatly exceeds the guarantee. It drills by boring, and is moved by water under pressure, while the Ferroux perforator acts by percussion and is propelled by compressed air. The comparison of the two, working under identical conditions, will enable engineers to determine which is the

preferable system. The ventilation of the Arlberg works will be accomplished by a separate apparatus, distributing air under low pressure through pipes at the point where the work is going on.

With the ingenious machine of Colonel Beaumont a gallery seven feet in diameter has been driven for the distance of over a mile and a quarter from the English shore in the gray chalk underneath the English Channel. The Beaumont perforator consists of a powerful bar of iron rotated about its center, with seven short teeth or knives of steel on each arm which scratch away the chalk from the face of the heading. At each turn of the bar the machine is impelled forward on a horizontal axis through a distance of seven millimetres, or about a quarter of an inch. The heading driven by the perforator is 2.14 metres in diameter and perfectly cylindrical. The axle on which the bar that carries the knives rotates is a powerful bar of steel. The rotary movement is given to it by means of a system of cog-wheels which successively reduce the speed originally imparted by compressed air to the actuating crank and communicated to the cog-wheels by a pair of friction cylinders. The horizontal movements of the machine are produced by a hydraulic apparatus, and are controlled by valves which allow the machine to be moved forward or backward, or to remain on one spot. When the machine has advanced by hydraulic pressure through a distance of 6½ feet, the machine is lifted off its bed by a combination of levers, and the hydraulic pressure is applied to the bed of the machine, moving it forward another stage. The rock is very finely divided by the knives of the perforator. The fragments fall to the floor of the gallery, and are gathered up by large scrapers and conveyed to cars at the back of the machine by buckets attached to an endless chain. The crank-axle makes 100 revolutions a minute, with a pneumatic pressure of two atmospheres, or 45 pounds to the square inch. The actual progress of the machine on the English side averaged 60 centimetres an hour and 15 metres a day. A more powerful machine is used on the French side, which accomplishes one metre an hour.

The execution of the New York Tunnel in the soft, silty bed of the Hudson River, between Jersey City and New York, is still problematical, as the works have stopped for the second time. The erroneous idea that compressed air would act as a support instead of timbering resulted in the distressing accident by which a number of men lost their lives a short time after the tunnel was begun. After that a permanent bulk-head of masonry was constructed near the shaft, containing an air-lock, consisting of an iron tube large enough for the admission of a man. The ingenious plan on which the tunnel is constructed has been before described. The plate-iron shell, within which the arched masonry is built, has

a movable bulk-head at the end. The shell is of boiler-iron, in sections 15 feet long. One plate of the temporary boiler-plate bulk-head is removed and the earth dug away from behind it. A second plate is in like manner taken out, if no difficulty has been experienced. Then a segment of the sheet-iron shell is bolted on to the completed part. The air-pressure, employed to keep out water, is 26 pounds to the square inch. When there is an escape of air, dry cement is applied to the hole and is carried in by the current until the hole is stopped. In the case of larger leaks much ingenuity is required, as also in getting in the shell-plates.

The Severn Tunnel, which will carry the Great Western Railway into the heart of the coal and iron district of South Wales, will probably be completed in 1884, 7,000 feet having been dug and arched at the close of the year. Since the irruption of water from a land spring, which seriously delayed the works, no similar mishap has occurred. The work progresses at the rate of 500 feet a month. With 20 pumps of various capacities, only half of which are operated continuously, nearly 12,000,000 gallons of water are raised *per diem*. The tunnel will be  $4\frac{1}{2}$  miles in length,  $2\frac{1}{2}$  miles under the Severn and 2 miles under the land. The strata under the river have been found sound and dry latterly. More water enters in the land-sections. The brick-work is made of vitrified brick set in Portland cement. There are 3,000 men employed and 14,000 pounds of explosives are used monthly. The tunnel passes through red sandstone under the river and hard pennant under the Gloucestershire shore. The minimum thickness of the roof, between the tunnel and the river-bed, is 40 feet, and the depth of the tunnel below high water 163 feet.

The shorter tunnel, which is being bored under the Mersey, resembles the other in being excavated in red sandstone. It is three fourths of a mile in length. The floor is 144 feet below high water. As in the Severn works, an enormous quantity of water has to be pumped out. The machine devised by Colonel Beaumont, for excavating the Channel Tunnel, has been adopted. It is expected to advance the driftway 30 yards per week.

The construction of the Brooklyn Bridge was first begun January 2, 1870. In 1877 the making of the cables was commenced, and in 1882 the approaches were nearly completed, and work begun on the superstructure. The caissons for the towers were 172 by 102 feet on the New York, and 168 by 102 feet on the Brooklyn side. The New York caisson weighed 7,000 tons, and the concrete filling 8,000 tons. The tower on the New York side contains 46,945 cubic yards of masonry, the Brooklyn tower 38,214 yards. The span over the river is 1,595 $\frac{1}{2}$  feet. The land-spans are each 930 feet long. The Brooklyn approach is 971, and the New York approach 1,562 $\frac{1}{2}$  feet. The total

length of the bridge is 5,989 feet. The sustaining cables, four in number, are 15 $\frac{1}{2}$  feet in diameter, and will each stand a strain of 12,200 tons. The wire which composes them is 12 feet to the pound. There are 5,296 wires in each cable. They are of galvanized steel and oil-coated. Each wire is 3,578 $\frac{1}{2}$  feet long. The wires are not twisted, but closely wrapped to form a solid cylinder. The tower on the Brooklyn side is laid on a foundation 45 feet below high water, while the New York tower rests on a foundation sunk 78 feet below the high-tide mark. The towers have each a section at the high-water line of 140 by 59 feet. At the roof-course they are 136 by 53 feet. The height of the towers above high water is 278 feet. The clear height of the bridge above high water in the center of the river is 135 feet at 90° Fahr. The height of the floor at the towers is 119 feet at high water. The top of the towers is 159 feet above the roadway. The anchorages are in masses of masonry 129 by 119 feet at the base, and 89 feet high at the front, and 85 feet at the rear. At the top they are 117 by 104 feet. The anchor-plates weigh 23 tons. The depots at the ends of the bridge will be of glass and iron, the one on the New York side 260 feet long and 59 feet wide. The cars will be propelled by stationary engines and wire-traction ropes.

Besides the great suspension-bridge at New York, a second bridge over the East River has been commenced farther up. It is to cross in two suspended spans from Ravenswood, Long Island, to the upper part of Blackwell's Island, and from Blackwell's Island to the New York shore. The bridge, with its approaches of iron trestle-work, will be 10,043 feet long. The suspension spans will be respectively 734 and 618 feet in length, and will have a clear height above the water at mean tide of 154 feet. There will be three chain-cables strung over iron towers, and holding up the iron trusses which support the floor of the bridge. The roadway will be 76 feet wide, giving room for double railroad-tracks, carriage-roads, and sidewalks. The towers will be formed by twelve wrought-iron columns of 2 $\frac{1}{2}$ -inch iron about 24 inches in diameter, braced in every direction. Each of the four towers will be 46 feet long at the top, 100 feet long at the base, and 260 feet high. The towers rest upon masonry piers 60 feet wide and 120 feet long. The cables, one on each side and one in the middle, will be double, consisting each of two chain-cables, one above the other, crossing each other in the center of the bridge on a pin-joint, and joining each other by symmetrical curves. The two cables are braced together with diagonal braces and divide the load between them. The natural advantages of the location are unequaled. At each abutment solid rock is found a short distance below the surface. The anchorage on Long Island and in New York will be in 40 feet of natural rock, and on Blackwell's Island it will be in 12 feet of rock re-en-



forced by 40 feet of masonry. The total cost is estimated at \$6,000,000.

A railroad-bridge has been erected across the Kinzua Valley, in Pennsylvania, for the New York, Lake Erie, and Western road, which is the loftiest structure of the kind in the world, and so light that it appears as if made of wire. The highest pier is 297 feet in height, the average height being 176 feet. It crosses the Kinzua Creek at an elevation of 2,100 feet above the sea. Engineers have for several years studied the best way to cross this deep ravine, which lies in the way of a railroad between Pittsburg and Buffalo. The gigantic viaduct which has been constructed was planned by O. W. Barnes. Its length is 2,051 feet from abutment to abutment. The height of the rail-level above the bed of the small stream in the center of this chasm is 301 feet. There are twenty spans of 61, and one of 62 feet. The width of each tower is  $38\frac{1}{2}$  feet at top. The truss is 6 feet high and 10 wide. It is continuous. The braced columns which form the piers are one foot in diameter. They incline with a batter of two inches in a foot. Each column rests on a base of masonry. The iron shoes to which the columns are fastened are imbedded in the copings of the piers, and each one is anchored by two large bolts passing through the pier and fastened to iron plates at the bottom. These bolts are designed to add to the security against windstrains. Four million pounds of iron and seven thousand cubic yards of masonry were used in the construction of the viaduct. The foundations are mostly in solid rock, but for a few piers near the bottom they are on piles.

The new bridge designed by the English engineers, Fowler and Baker, to cross the Forth, which will be the widest-span bridge in the world, is of a new type, and will be the first bridge built of steel. The principle of the design is to have enormous balanced cantilevers on two river-piers, and the space between them in the middle span, bridged by a long lattice girder, carried from the end of one cantilever to the other. The steel employed will be tested for a tensile strength of 30 to 33 tons to the square inch, with 20 per cent elongation, and for a resistance on compression of from 34 to 37 tons, with 17 per cent elongation. There are two spans bridged in the way described. The piers holding the cantilevers are iron frames, resting on foundations of rock and hard clay, each 350 feet high. The length of the central pier is 270 feet, that of the two others 150 feet. The spans are each 1,700 feet. The balanced cantilevers, or brackets, are about 675 feet long each. They are fastened at top and bottom to the iron frames of the piers. The two projecting brackets bridge about 1,350 feet of the space between the piers. The remaining 350 feet are closed by a lattice girder, resting on the tips of the cantilevers. The weight of each bracket is about 3,360 tons. A suspension-bridge over the Forth was commenced, but the

work was abandoned when the Tay Bridge disaster had awakened the minds of engineers to the magnitude of the wind-strains which such structures must undergo. The present design was intended to attain exceptional strength and rigidity, and to stand heavy freight and fast passenger traffic, as well as the heaviest gales which sweep the Scotch coast.

The new Eddystone Light-house was set in operation on May 18th. The tower was designed by James N. Douglas, Chief-Engineer to the Trinity Corporation, which has charge of the British light-house system. It is as solidly constructed as the old tower, and firmer than if hewed out of a single block of granite, for the separate stones are without a flaw, and are so dovetailed together that it is impossible for any of them to be displaced. Every one is fitted into those above, below, and on each side, with projections and grooves, and the interstices are filled up with Portland cement. The curved contour of the old light-house is also retained, but with an important modification. Smeaton's famous design, which allows the waves to roll up the curved sides of the column, instead of dividing the stress of the seas, concentrated their force at the top of the tower, where they exercised a powerful leverage upon the base. The tower, with its interlocking blocks of granite, was as strong, when recently taken down, as when it was first erected, over a century before; but the reef on which it was founded, weakened by under-washing, had become insecure. The new light-house is placed on the southern rock, the middle one of the three main reefs, 127 feet from the old one, which stood on the western rock. The Eddystone group of rocks occupies about a square mile at low water. Their situation is nearly midway between Start Point, in Devon, and Lizard Point, in Cornwall, being about ten miles nearer the latter. The rocks are of gneissic formation. The new tower, instead of rising in a parabolic curve from below the high-water mark, is placed upon a cylindrical base of masonry  $44\frac{1}{2}$  feet in diameter. The vertical sides of this solid granite base rise  $2\frac{1}{2}$  feet above high water. From this cylindrical base the curved shaft rises, leaving a terrace  $4\frac{1}{2}$  feet wide all around. The granite blocks of which it is built are some of them  $6\frac{1}{2}$  feet deep and 2 feet thick, with their outer curved face 3 feet 10 inches broad. The height of the focal plane of the light in the old tower was 72 feet above high water, while that in the new house is 133 feet, the former being visible 13 and the latter  $17\frac{1}{2}$  miles.

The Tillamook light-house, placed by the United States Light-house Board on the coast of Oregon, eighteen miles south of the mouth of the Columbia River, is invaluable for the growing commerce of Portland and Astoria with all parts of the world. The coast is lined with precipitous basaltic cliffs. Tillamook Rock is a reef rising 90 feet above the water a mile off shore. The light is 136 feet above the sea. The

dangers of this rock-bound coast are increased by the frequent fogs. The site was selected in 1878, but the sea was never calm enough to permit of landing until June, 1879; and then the first men who landed jumped into the sea to escape a coming storm, and were rescued with life-lines. A man was able three days later to get the measurements, finding that a flat surface of 3,600 square feet could be obtained by leveling the rock to the uniform height of 90 feet. In September a mason landed to plan the buildings, but he was washed off and drowned. In October a party of quarymen were landed from the revenue-steamer *Corwin*, which was moored to a buoy in 25 fathoms of water. A cable was carried from the vessel to the rock, by which men could be landed in a breeches-buoy. It was many weeks before the tools and stores could be landed, and a shelter constructed. The work of excavation, which continued through the winter, was very dangerous. They held on to ropes while drilling the holes, and always kept on the leeward side to avoid being blown into the sea. In January there was a storm which carried away their store-house. The waves, breaking in a chasm which divides the rock into two parts, were dashed over the whole surface continuously for several days. The men were nearly starved before communication could be established again with the steamer. The leveling was completed in May, 1881. The excavated rock was thrown into the chasm for the purpose of closing it, but the largest fragments were soon swept out by the waves. Work was begun on the building in June. All the blocks of stone were squared and numbered at Astoria, and were landed from the steamer by a "traveler" over the cable. The main building is 48 feet by 45, with accommodation for four keepers. Above it rises a stone tower 35½ feet high. In an adjoining building are steam fog-sirens. The light is a white flash-light of the first order.

The recently constructed Darjeeling Tramway or Himalayan Railway unites the steepest grades with the sharpest curves that are found in any existing railroad. The road winds like a serpent among the foot-hills of the Himalayas, and ascends to the region of clouds, the terminus, Darjeeling, being 7,700 feet above the level of the sea. Some of the curves have a radius of only 70 feet, while grades of 50 in 1,000 are encountered. The total ascent in the 50 miles of railroad is 7,400 feet, which gives a mean inclination of 28 in 1,000. The gauge is two feet. The rails are of refined steel. The ties are two feet eight inches apart, with extra ties under the joints, and for the sake of rigidity supporting plates under the outer rails of all the curves of 125 feet radius or less. The cars are open ones of the lightest construction possible. The locomotives are reduced models of the ordinary engine with tender.

The steam-heating of towns is making progress in the United States, notwithstanding fre-

quent and troublesome accidents which the use of so unmanageable an agent as steam entails. In the city of New York two companies have laid steam-pipes through the streets in the most thickly-built portion of the town. There, as in other places, numerous mishaps have occurred from the bursting of joints and breaking of flanges. The pipes are fitted with screw-joints of wrought-iron. The system of fitting invented by the English engineer, Perkins, has not yet been tried. He surfaced the end of one of the tubes and bevelled that of the next one, so that when they were screwed together in a collar the two ends cut into each other and formed a metallic connection.

**ENGLISH CHANNEL TUNNEL PANIC.** The demonstration of the feasibility and commercial profitableness of a submarine railroad tunnel under the Straits of Dover was promptly turned to account by the Southeastern Railroad Company, the French *Compagnie du Nord*, and other English and French capitalists. The ingenious tunneling machine of Colonel Beaumont (see *ENGINEERING*), and the experimental cuttings which proved the continuity and impermeability of the chalk stratum (see *ENGINEERING* in preceding volumes), solved the engineering difficulties. Financial support beyond the requirements was assured to the Channel Tunnel Company presided over by Sir Edward Watkin. The French were eager to co-operate. When the work was already well under way, its success assured, and nothing was wanting but the permission of Parliament, an agitation was started against the scheme which gained such strength that the work had to be suspended until more sober counsels prevail.

The objections to the underground passage were purely strategic. The demonstration that with the advances in naval art the "silver streak," as the English Channel is figuratively designated, could easily be overstepped by modern armaments, and an invading force landed on the southern coast of England without warning, at the rate of a regiment every five minutes, instead of obviating, had really prepared the way for the agitation of military alarmists against the Channel Tunnel. When the experimental operations proved to be a definite success, and the time came to receive the permission of the Government, orders were given at the instance of Sir Garnet Wolseley and other military authorities to stop the work until the subject had been examined by a commission. The Government had entertained no such fears when Lord Derby, as Foreign Minister, in a communication to the French Government, cordially approved the scheme in 1874. The French Minister of Public Works, on the strength of the acceptance of the principle of the tunnel, signed the convention with Michel Chevalier, President of the French Channel Tunnel Company. The scare had already been started, but, when the note of alarm was caught up by the press, it spread among all ranks and conditions of men. Pro-



tests were signed by people who had acquired distinction in every walk of life—poets and soldiers, clergymen, statesmen, judges, merchants, noblemen and trades-union officials. The people were exhorted to shut their ears against ridicule and close their minds to argument in a matter on which the fate of England depended. Peers and members of Parliament who visited the works at Dover were warned against the conversational wiles of Sir Edward Watkin and the bribery of his “champagne lunches.”

The danger apprehended by the panic-monsters was that by a stealthy and treacherous stroke executed in the midst of profound peace the French might seize the English end of the tunnel and forward by train through the submarine passage a force which exceeds the existing military strength of England. An army of one hundred and fifty thousand men would be able to sweep everything before it. It could be transported through the tunnel in a day or two, and march into London in four or five days. An expedition of two thousand men could capture Dover and hold it while the troops were coming by the railroad. It would require no stronger force to overpower the garrison after effecting an entrance into the fortress by surprise or by escalade. A body of two thousand could either come by trains after taking possession of the telegraph and using artifices which could not be detected, or they could be disembarked in the harbor on any dark night, or they could come in disguise and collect on the British shore, arming themselves from secret stores of weapons. The British navy would be powerless while the French were pouring their battalions into the heart of England. The temptation to an unscrupulous military adventurer, whose dire ambition might never be suspected under his perhaps “lawyer-like exterior,” would be the richest and the easiest conquest which the world offers. In possession of the capital and of the arsenal at Woolwich, from which alone a fresh army could be equipped, the French might exact any terms, perhaps fifteen milliards of francs, the surrender of the British fleet, and probably the British end of the tunnel. The last loss would be irreparable. If Britain could ever hold up her head again among nations, it would only be by adopting the system of universal military service. France with her whole population under arms need fear nothing from England, but bridging the “wet ditch” would destroy the independent position of the “tight little island,” and entail the military system upon Great Britain under which the Continental nations groan.

These fears, springing rather from sentiment than reason, could not be understood by Moltke and other European strategists, but they prevailed among the soldiers and sailors of Great Britain. On the Continent, railroads cross every frontier in all directions. The nations are glad to have their mountain barriers pierced by

tunnels, and do not even fortify the entrances. The Germans, when invading France, left the railway cars and marched around tunnels for fear of arrangements for their destruction. The French Government has favored every project for bridging the channel.\* They have never felt any tremors.

The English advocates of the tunnel have met the anxieties of the military alarmists by proposing plans for rendering the tunnel-mouth secure from the imaginary treachery and surprise. As long as the British ironclads hold the sea, a few well-directed shells from a frigate could close the mouth of the tunnel at any time. The Castle of Dover is considered a first-class fortress, and safe from capture by a *coup de main*. A strong outwork, or casemated batteries excavated in the cliffs, with guns constantly trained upon the entrance to the tunnel, could be built and connected with the fort by a subterranean passage. A narrow gallery could be dug from the fort down to the tunnel, and arrangements made by which the tunnel could be flooded by having iron pipes passing from the sea into the tunnel, closed by stop-cocks, which could be turned at any time by the officer of the guard. The ventilating engines could pump their smoke into the tunnel instead of air, and it would at once become impassable. Reservoirs could be opened, letting carbonic-acid gas flow into the tunnel. Colonel Frederick Beaumont suggested that trains should emerge from the tunnel by being lifted through a vertical shaft by hydraulic elevators, and that the inclined gallery connecting the tunnel with the land lines should be blocked by a time mechanism, in such a way that it would require some definite time to open it to traffic, and that its entrance should be directly under fire from the batteries. The arrangement of a hydraulic lift was deemed a sufficient safeguard by Lord Dunsany and General Wolsley, the leading opponents of the tunnel, but one which would deprive the passage of its value for speedy transit.

Two projects for a channel tunnel were submitted to Parliament, and referred to a com-

\* Napoleon Bonaparte, when First Consul, took an interest in the plans of Matthieu for a tunnel. Thomé de Gomond elaborated a scheme in 1856 which the third Napoleon proposed to put to the test. It was for a tunnel with ventilating shafts rising through thirteen artificial islands. Several engineers, fearing the danger of a tunnel's crossing fissures or quicksands, have proposed submerged tubes. Bateman, an English engineer, planned a cast-iron tube built out in separate lengths, within a sliding cylinder. Zerah Colburn, the American engineer, suggested constructing one eighteen feet in diameter on a dry-dock, and hauling it out as each section was added, until the floating tube reached the opposite coast. Bradford Leslie, an engineer from India, worked out a plan for a tubular floating tunnel held down to a certain depth under the water by anchors. A visionary project for a bridge over the strait was considered by Louis Napoleon. Low's plans for a tunnel, approved by Sir John Hawkshaw, which were the basis of the present enterprise, were propounded about 1867. John Fowler has taken advantage of the recent controversy to revive his scheme for conveying railroad trains across on ferry-boats. Sir Henry Bessemer's ingenious ship with a swinging saloon, which knocked away a portion of the Calais pier, failed because its shallow draught rendered it unsteady. Captain Dicey's double-hulled steamers proved too slow.

mittee of the House of Commons, which condemned them both. The report of the committee precludes the construction of any tunnel until other ideas control the minds of the military authorities. The Duke of Cambridge, commander-in-chief, thought that the company should first of all be required to deposit in the treasury a sum sufficient to construct a first-class fortress and maintain a garrison of 10,000 men. The absolutely necessary military precautions demanded by him and General Wolseley, and indorsed by the committee, were that the tunnel's mouth should be beyond range from the sea, commanded by the guns of such a fortress, and provided with a portcullis. There should be arrangements at command from within the fort, and at different points outside, for filling the tunnel with asphyxiating gases, for temporarily flooding it by means of sluices, for closing the entrance with mines on the land, and for permanently flooding it by mines above the roof, opening communication with the bottom of the sea. Even these precautions would not satisfy the nervous warriors of England, who dread that the tunnel and its defenses might still be captured intact by a conquering army invading England by sea, and permanently held by the victors.

**EPIDEMIC DISEASES, SANITARY CONTROL OF.** The sanitary control of epidemic disease in the United States, or, rather, its attempted control, is of so recent origin that at the present day but little other than the results of limited experience which has been gained in the last few years can be recorded, leaving to the future the final collation of the accumulated evidence, and the settlement of the points involved. Enough has been learned, however, by that experience, and by the experience of foreign nations, to justify the assertion that the diseases now classed as epidemic may be placed under control. We say epidemic diseases, but, properly speaking, we should rather say that such diseases are of a specific nature, liable to be spread by certain material influences. There is at this time no reason for going into the discussion of the contagious or non-contagious nature of a class of diseases known to invade certain localities at certain seasons of the year, and to affect large numbers of the human family; for modern researches into the causation and origin of the class mentioned have proved beyond a doubt that they are produced by a certain germ or seed, capable, under favorable circumstances, of self-propagation, and communicable by certain recognized agents. Among these agents, air, drinking-water, and food, in the order named, are believed to be the principal infection-carriers. Researches of Pasteur, Koch, and others, have placed the germ or seed theory beyond dispute; and, although some doubt has been expressed as to the demonstration of the particular bacillus of each specific disease, yet their existence, and the general agreement among sanitarians as to the essential correct-

ness of the theory, that epidemics are consecutive and not synchronous, is, we think, established. There are five specific diseases which have prevailed at different periods in the history of mankind, about which the question of transmission is pretty clearly established. These are the Oriental plague, cholera, measles, small-pox, and yellow fever. There are certain other specific diseases, highly infectious in their nature, which, although rarely taking on the form of general epidemics, are yet transmissible by some one of the vehicles mentioned. These are typhoid fever, diphtheria, and scarlet fever. It is common to speak of all the affections above enumerated as preventable diseases, although it is best not to accept that term in its literal sense; for, while it is true that they may be prevented from becoming epidemic by means hereafter to be mentioned, yet it is doubtful if the germ can be swept from the face of the earth, except by a more united effort than has heretofore been made, or is likely to be made in the near future. It is, perhaps, scarcely in place to mention the diseases of animals belonging to this class, in this paragraph; but the experiments of Pasteur in regard to the prevention of chicken-cholera and silk-worm disease, and that of the veterinarians of this country in the prevention of pleuro-pneumonia and glanders, are directly corroborative of the prevailing theory regarding diseases peculiar to the human race. Without dwelling further on this phase of the question, we pass directly to the consideration of the essential characteristics of one of the diseases named. The plague is a contagious specific fever, attended with an eruption of carbuncles, and swelling of the inguinal and other glands of the body. Hecker, who has written an extensive work on this disease, assumes that Europe alone has lost no less than twenty-five millions of its inhabitants in the various epidemics of the plague that have occurred. He says: "In regard to the nature of the contagion, every spot which the sick had touched, their breath, their clothes, spread the contagion; and, as in all other places, the attendants and friends, who were either blind to their danger or heroically despised it, fell a sacrifice to their sympathy. The pestilential breath of the sick who expectorated blood caused a terrible contagion far and near; for even the vicinity of those who had fallen ill of the plague was certain death, so that parents abandoned their infected children, and all the ties of kindred were dissolved."

"The contagion of the plague appears to have frequently been conveyed by drinking water from the very inefficiently protected wells; hence there arose a cry that the wells were poisoned, and suspicion fell upon the Jews, who were almost everywhere racked and tortured, burned and massacred."

Dr. Russel states that "in the most destructive forms the vital forces appear to be suddenly annihilated by a most intense and malignant



blood-poisoning, and death is remarkably rapid, without external eruption of buboes, carbuncles, or spots. In such cases the body has no time to show the 'tokens' before death. In the great majority of cases the disease is preceded by lassitude, loss of strength, anxiety, and afterward by vomiting. The characteristic swellings in the arm-pits and groin follow, petechiæ and carbuncles appear, delirium succeeds, and too frequently death. Pathology shows rather the effects of the poison on the tissues and organs, as shown by enlargement and congestion of the spleen, kidneys, etc., than anything especially characteristic. There are numerous hæmorrhagic effusions, and dissection shows that buboes always result from enlargement and suppuration of the lymphatic glands. It is probable that all the fluids and secretions of the plague-stricken body are contagious" (Dr. Blythe, "Dictionary of Hygiene").

The symptoms of cholera, small-pox, and yellow fever, are so well known that no particular mention need be made of them in this place.

**CONVEYANCE OF INFECTION BY AIR.**—The atmosphere is essentially a diluent of all gaseous poisons. It has practically this effect in relation to germ-diseases, for it is evident that, when the germs are scattered through a large quantity of air, the propagation is retarded; for the seeds being less numerous, their effects are not so apparent; but the distance to which specific germs can be transmitted in the air can not at this time be definitely stated. The air, however, is always infected in the immediate vicinity of *fomites*, which is a rather vague term, meaning any substance which may retain germs from a plague- or fever-stricken patient. Thus there are included in this general term all textile fabrics which have been in contact with patients, such as clothes, rags, bedding, linen, and the like. It is reasonably certain that such fomites, having been in contact with the excreted or vomited matters, perspiration, or other exhalations from the skins of patients affected with some one of the specific diseases, afford a safe place of refuge for the germs; and if fomites be placed in boxes or trunks, or in bales, they retain the power of propagation through an indefinite period of time; and such fomites, when placed in favorable conditions, allow the transmission of the germs to the air surrounding them, and thus the contagion is supplied, to be disseminated from one place to another. In the epidemics of the plague in Asia, it has been demonstrated that rugs and the like, when carried to a place quite remote from the original place of infection, and opened out, have been a cause of the development of the disease in a new and before unaffected locality. This also accounts for the sudden outbreak of epidemics in remote points. In the cholera epidemic of 1873, in the United States, the Crow River settlements in Minnesota were free from cholera until the

opening of baggage at Willmar, brought thither by immigrants from Europe (McClellan, "Cholera Epidemic of 1873 in the United States," Washington, 1875, p. 441). It is believed to be a fact that the outbreak of yellow fever at Memphis, Tenn., in 1879, originated in the unpacking and airing of certain infected clothing that had been stored away since the terrible epidemic which had visited that city in the previous year; and such cases have been of so common occurrence as to give cause for a well-grounded fear of retaining year after year, in any house, textile fabrics which have directly or indirectly been in contact with yellow-fever patients. In regard to the general infection of the air, it has been demonstrated that a strong current of air, blowing over infected articles, will convey the germs in sufficient numbers to develop the disease in persons inhaling the infected air; and it has even been known to affect animals. For instance, the widely-known Ceeley case, reported in "Transactions of Provincial Medical and Surgical Association," quoted by Aitken ("Science and Practice of Medicine," vol. i, 1872, p. 400), as follows: "At the village of Oakley, about sixteen miles from the town of Aylesbury, small-pox had been epidemic from June to October, 1840. Two cottages, in which three persons resided during their illness, were situated, one on each of two sides of a long, narrow meadow, comprising scarcely two acres of pasture-land. One of these three patients, though thickly covered with pustules of small-pox, was not confined to her bed after the full development of the eruption, but frequently crossed the meadow to visit the other patients—a woman and a child—the former of whom was in great danger from the confluent malignant form of the disease, and died. According to custom, she was buried the same evening; but the intercourse between the cottages across the meadow was still continued. On the day following death, the wearing-apparel of the deceased, the bedclothes and bedding of both patients, were exposed for purification on the hedges bounding the meadow. The chaff of the child's bed was thrown into the ditch, and the flock of the deceased woman's bed was strewed about on the grass over the meadow, where it was exposed and turned every night, and for several hours during the day. This purification of the clothes continued for eleven days. At that time eight milch-cows and two young heifers were turned into the meadow to graze. They entered it every morning for this purpose, and were driven from it every afternoon. Whenever the cows quitted the meadow the infected articles were again exposed on the hedges, and the flock of the bed was spread out on the grass and repeatedly turned. These things remained until the morning, when the cows were readmitted, and the contaminated articles were supposed to be withdrawn. It appears, however, that the removal of the infected articles was not always accomplished so

punctually as had been enjoined, so that, on one occasion at least, the cows were seen in the midst of them, and licking up the flock of the bed which lay on the grass. These cows were in perfect health when first put out to grass in this meadow; but in twelve or fourteen days, five out of the eight milch-cows showed symptoms of sickness, and the whole of the cows were certainly affected within three days of each other," with the general symptoms of small-pox.

Immersion in water seems to have but little effect in destroying the germs of yellow fever and small-pox, for it has been noticed that an infected mattress thrown into the Mississippi River from a steamboat, and afterward recovered by persons living on the shore, communicated the contagion. The air is also infected by the presence of bodies dead of specific diseases. To such an extent is this the case that in many cities public funerals of persons who have died of certain specific diseases are forbidden. The so-called "sewer-gas" is simply air polluted by the various organic matters contained in the sewers; and, as the diseases have their specific seed or germ, it follows that they can not be spontaneously generated from a gaseous poison. Sewer-air, however, may be a carrier of infection when the seed is sown, and it is certain that sewage itself, and the cryptogamic growths on the sides of sewers and house-drains, afford a favorable field for the propagation and development of fever-germs, especially typhoid fever, scarlet fever, and diphtheria; and, when the excreted matters from a typhoid-fever patient are conveyed into the sewer, they may then affect the air passing through it, gain entrance into the house, and in this manner spread the infection. If it were possible to prevent the discharges from typhoid-fever patients, and expectorated matter from patients suffering with diphtheria, from gaining entrance to the sewers, it is doubtful, in view of existing theories, if sewer-air could ever be a means of propagating these infections.

**WATER AS A CARRIER OF INFECTION.**—The most frequent means of propagation of typhoid fever as well as cholera is by water-carriage of the germ. The several outbreaks of typhoid that have occurred in England and this country have been traced, without much possibility of error in the conclusion, to water used for drinking purposes having become infected with the excreta from typhoid-fever patients. In a recent epidemic in England it is believed that it was due to the washing of milk-pans with polluted water!

Dr. MacNamara states: "The eighth characteristic of cholera is that the more explicit the examination the clearer the fact appears that the disease in the majority of cases spreads from one human being to another by means of the cholera fomes finding its way into drinking-water, and thus into the intestines of other people." Of the truth of this proposition there is abundant evidence.

**FILTH AND SEWAGE.**—In consonance with the views expressed as to the specific origin of the infection named, it follows that no amount of filth, no amount of ordinary sewage, can produce epidemic disease of its own accord, unless the seed be previously sown. It is certain, however, that fever-germs are best propagated and attain their greatest malignity where filth is found in the greatest abundance. That it will not produce it is proved. An example illustrating this fact was recently given by Minister John M. Langston in regard to the sanitary condition of Port-au-Prince, Hayti ("Bulletins of Public Health," Marine Hospital Service, 1881, page 114): "The streets (of Port-au-Prince) are exceedingly foul, and police regulations of no sort are enforced. There is no regulation to oblige even the filthiest person to remove deposits from the streets, or from the gutters and sidewalks; and the harbor is also full of foul matter of every sort." Now, although this filthy condition had then existed for several years, in one of the hottest of climates, the filth itself saturated with moisture, and necessarily raised to the elevated temperature tending to develop the latent germs of yellow fever, if any were present, the city was free from it for a period of fifteen years up to 1879, although it raged in the adjacent islands. It is known that heat and moisture favor the development and propagation of specific fever-germs when once sown, with the exception of the small-pox virus, which attains its greatest malignity at a low temperature.

**SANITARY CONTROL.**—From what has been said as to the general nature of infection and the means for its propagation, the measures to be adopted for the sanitary control of epidemic diseases are almost self-apparent. They are such, in the first place, as will destroy the germs; and, in the second place, to enforce perfect cleanliness, so that the germs, although gaining entrance to the proper spot, shall not find a harboring-place for their propagation. One of the first things that should interest a municipal health officer is the sanitary history of his town or city. He should ascertain with especial care the periods at which epidemics of any kind have appeared in the city or village under his charge. Wherever possible he should ascertain by investigation the spot where the first case made its appearance, and, if possible, trace the source of infection. Then the directions in which it spread from the initial cases should be noted. Other things being equal, the average meteorological conditions of the locality being practically unchanged from year to year; the introduction of the infection in a particular manner will usually lead to the same result in any given year, as in the past, favored on the one hand by increased population and diminished on the other by its decrease. Having mastered the details as to the past history, he should next ascertain the present sanitary condition of the locality by the inspection of the place, and an examina-



tion of its vital statistics as reported to the proper officer, week after week; its cleanliness or uncleanness; bearing in mind its history and the sources from which infection is likely to be admitted. The natural influence of locality favoring the propagation and spread of certain diseases may be entirely changed by perfect cleanliness. The experience of the British in India, and the French in Africa, is on this point quite conclusive. Cholera is a disease believed to have originated in Asia (the banks of the Ganges being, perhaps, its native habitat, if, indeed, a place of nativity can be assigned to it). It is called Asiatic cholera, in recognition of the place of its nativity. Professor Blanc ("Cholera, how to Avoid and Treat it," London and Paris, 1873, p. 40) states: "While I was on special duty in Abyssinia, cholera gained the camp of the Emperor Theodore, where it was brought by recruits from Tigré, in May, 1866. This disease had been making havoc in Tigré. We were not surprised, therefore, to hear that it had spread over other provinces, and that several cases had already broken out in Kourota, a town situated on Lake Tana. The King's camp was pitched in a very unhealthy situation, on low, swampy ground. Fever, diarrhoea, and dysentery had prevailed to a great extent. The Emperor, in the hope of arresting the spread of the epidemic, moved his camp to the neighborhood of Kourota. A worse place he could not have selected. He first encamped on a low promontory south of Kourota, but the cholera had by this time broken out in the camp and hundreds were dying daily. He again moved his camp, this time to some high ground a mile or so north of the town. The church was so completely choked up with dead bodies that no more could be admitted, and the adjoining streets offered the sad sight of countless corpses, surrounded by the sorrowing relatives, awaiting for days and nights the hallowed grave in the now crowded cemetery. At last the Emperor asked for my advice. I told him to proceed at once by different routes and follow the many small streams that flow from the highland of Begemder; to protect from pollution the water used for drinking; and, once on the plateau, to break up his army as far as possible, selecting a few healthy, isolated localities, where every fresh case that broke out should be sent. He acted upon this advice, and before long had the satisfaction of seeing the epidemic lose its virulence, and before many weeks disappear entirely." Dr. Blanc shows by the above case how much may be done by isolation and scattering into camps, and separation of the sick from the well, and, to indicate how much better the disease was managed in India, under sanitary control, cites the following instance:

"Cholera had been raging during May and June, 1872, in the Mahratta country, a well-populated district, stretching from the eastern slope of the Bombay Ghauts. The altitude of

this plateau averages 2,000 feet above the level of the sea. It is mostly composed of laterites, well cultivated, sparsely wooded, possessing a few running streams, more or less dried up in hot weather, and a moderate rain-fall for India. We had learned from the reports of the police and civil officers in charge of the districts that the epidemic was of a most virulent type. Some medical subordinates were sent to the localities most infected, and they confirmed the great extent and severe character of the outbreak. I was at the time civil surgeon of Sattara, a town of some 23,000 inhabitants. . . . Informed of the progress of the epidemic in the direction of Sattara, with the assistance of the civil authorities, the following sanitary measures were carried out: The whole town was thoroughly inspected, filth and rubbish were carted and burned to leeward of the town, drains were flushed, houses were whitewashed, gardens cleared out, and all excrementitious matters removed to trenches dug for that purpose near the city, and filled with earth. Policemen were stationed at the different roads leading to the city, provided with medicines to distribute to persons suffering from diarrhoea, and directed to accompany to a building set apart for the purpose any case of cholera that should be reported to them. The town fortunately receives an excellent supply of drinking-water from a small lake situated on a hill in the vicinity of Sattara. Policemen were posted at the reservoir which receives this water; the place around was kept clean and dry, and no one was allowed to bathe or wash clothes at it or in its vicinity. The inhabitants were warned not to use the water of their wells for drinking purposes, but to fetch it from the reservoir. They were also told to apply for medicine on the first appearance of diarrhoea, and that every case of cholera that declared itself in the town should be taken to the hospital, and that myself or my subordinates should be informed of the occurrence, when some one belonging to the hospital staff would visit the patients. In the beginning of July a few cases were admitted into the cholera hospital, one or two a day, during some eight or ten days. Every one of these cases had been contracted in the villages south of Sattara, the district where the cholera was at the time prevailing. All the discharges of cholera-patients were at once saturated with disinfectants, and buried in trenches dug for the purpose, and the clothes and bedding of all were destroyed. A good ventilation, fires, and disinfectants were used in and around the cholera-ward." Although Sattara was surrounded by villages, and in all of them the cholera raged for several weeks, not a case broke out in the city while under this management. About a mile from Sattara there was a military cantonment, composed of European civil and military troops. This cantonment had a strict quarantine enforced around it as long as a single case of cholera remained under treatment at the hospital, and for some

days afterward no communication was allowed between the town and the camp. It also escaped the general infection.

CONTROL AFTER AN EPIDEMIC HAS BROKEN OUT.—From the foregoing it will be seen that the most active measures should be taken to *prevent the introduction* of infectious or contagious diseases, *preventive* measures taking in all cases the highest rank, cleanliness and watchfulness being the most important. Dr. Blanc's plan at Sattara could not well be improved upon. Unfortunately, however, in the United States, a land of universal liberty, liberty is too often interpreted to mean license, and the people are impatient of sanitary regulations sufficiently rigid to prevent the introduction of specific diseases. It therefore follows that it is only in great public exigencies that the reasonable and necessary means for their prevention can be carried into effect. We must, then, make up our minds to combat disease after it has appeared and becomes epidemic, rather than expect to prevent it, in the present state of popular information upon this subject.

The common carriers of commerce are usually the vehicles by which diseases are transmitted from place to place. Ships and steamboats afford more favorable conditions for the growth and propagation of germs than railway-cars, on account of the ever-present moisture in the vessels, and the greater humidity of the air immediately surrounding them. Maritime quarantines, therefore, are essentially necessary to guard against the natural tendency of water-craft to spread contagion, but it would be more in accordance with the nomenclature of the day if the term "quarantine" were abandoned and "inspection-station" substituted, for all vessels should be periodically inspected, whether infected or not. The sanitary inspector should be not only well informed in regard to fomites and the sanitary condition of the port or place from which the vessel has arrived, but he should be sufficiently versed in marine architecture to enable him to thoroughly examine every portion of the vessel. The crew and passengers should be mustered, and, if any are sick from contagious disease, they should be immediately removed from the vessel, and the state-room or berth, with the bedding therein contained, thoroughly fumigated and disinfected, or preferably burned, and the sick persons themselves removed to a hospital for contagious diseases, established for that purpose. If the vessel be otherwise thoroughly clean, she will be healthful, and may be allowed to pass without detention. On the other hand, should the vessel be found in an unclean state and the bilge-water foul, she should be pumped out as dry as possible, and thoroughly disinfected. It is always safe to pump out the bilge-water whenever opportunity offers. Various kinds of disinfectants have been recommended, but it has been found by experience that the one of most

easy application in such cases is sulphurous acid gas. This is applied by placing a brazier in which charcoal has been lighted in the place to be fumigated, and throwing on the red-hot coals, or in a basin placed thereon, a quantity of crude sulphur. As the sulphur burns, sulphurous acid gas is thrown off, and permeates every portion of the apartment in which it is placed. It is highly destructive to bacteroid growths. Before placing the brazier in the hold, the bilge-water may be replaced by new sea-water—itsself a capital disinfectant—and again pumped out.

When a case of small-pox or yellow fever is found to exist in a house in town or city, practically the same measures should be taken—namely, removal of the sick to a special hospital, disinfection of the apartment, thorough fumigation of the entire house, and the prevention of well or unprotected persons gaining access to the apartment. If it be a house in a crowded portion of the city, it should be promptly quarantined, and the patient removed to a hospital for contagious diseases; or, if this be not practicable, the patient should be effectually isolated. All bedding and clothing exposed to infection, carpets, window-hangings, wall-paper—if the room be papered—picture-backs, when covered with paper, and everything capable of retaining the disease-germs (fomites) should be burned or buried in a trench. When a case of cholera has appeared, the discharges from the bowels should be covered with chloride of lime, and, whenever practicable, thrown into a furnace. No such matters should be thrown upon the ground or allowed to gain access to the public sewer, and all persons should be warned to promptly check any attack of diarrhoea, however slight. By these means alone it is possible to prevent the spread of these epidemic diseases in town or city; provided, however, that the surroundings of the infected house be cleaned and properly disinfected. Out-door disinfectants for use in such cases consist of copperas, ordinary quicklime, or chloride of lime—the latter being the most powerful, but objectionable to many on account of its giving off chlorine, which has a very pungent, acrid odor.

Public funerals in all cases of death from small-pox, cholera, yellow fever, and diphtheria, should be prohibited and the coffins hermetically sealed; when this is impracticable on account of the expense, the same result may be attained by coating the body with tar. The practice of cremation instead of the ordinary inhumation is to be commended, on sanitary grounds, in all such cases.

SANITARY CORDONS.—Sometimes, however, cases of infectious disease have escaped control by the ordinary measures. In order to prevent the spread of the disease to contiguous villages, towns, and adjoining districts, it has been found expedient to establish a sanitary cordon about the town or city, while, at the same time, sanitary measures are being carried



on within it. A cordon consists of a body of police, militia, or military, patrolling a certain line, extending, according to the necessities of the case, a sufficient distance to completely invest the infected district. A better illustration can not be given of a sanitary cordon than the description of the manner in which it was managed in Russia, and more recently in the United States. The Oriental plague made its appearance in the district above Astrakhan, in Russia, about the middle of November, 1878. It prevailed along the river Volga, and upon its islands. The center of the malady was in the village of Wetljankaja, with a population of some seventeen hundred inhabitants. The Governor of Astrakhan telegraphed to the Minister of the Interior the report of the medical supervisor of the Cossack forces in the district of Astrakhan, Dr. Depner. A few cases had appeared in the previous year, but the disease had not become epidemic until, as before stated, November, 1878. From the 27th of November to the 9th of December, out of one hundred sick in Wetljankaja, forty-three died; and in less than a month two hundred and seventy-three persons died of the disease. It then spread from Wetljankaja to the surrounding villages, and was declared epidemic. "Dr. Koch and six army-surgeons became victims to the epidemic, the priest died, the Cossacks who attended the sick or removed the dead died; almost all died who in any way came in contact with the sick or dead." Dr. Depner then arrived at the conclusion that the only means for suppressing the disease was quarantining; and on the 11th of December Dr. Depner with Colonel Preibanow instituted measures. He could not prosecute further observations, however, for he himself fell sick with the plague. These facts being telegraphed to the Emperor of Russia, the imperial committee of ministers was convened, and the following rules were adopted, which received the imperial sanction:

"1. (a.) The inhabitants of the colony of Wetljankaja shall be transferred and distributed as shall seem best after a careful examination of the local requirements, the limit of the quarantine not to be overstepped.

"(b.) The appraisement of the movable and immovable property destroyed by fire, as likewise the fixing of the indemnities to be paid to

the owners, shall be reserved for a special commission, under the presidency of the Governor of Astrakhan, with the participation of members of the Cossack administration and of the Ministry of the Finances, the Ministry of the Domains, and the Ministry of the Interior, according to regulations which shall be prepared on the spot by the aforesaid commission.

"(c.) This commission shall be charged with the execution of all the measures that may be necessary for the destruction by fire of the colony of Wetljankaja, as likewise of all measures necessary to supply the population transferred from that colony with food, underclothing, and warm garments—to provide for the treatment of the sick, etc.

"2. That the acting Minister of the Interior may be authorized to extend the measures referred to concerning the colony of Wetljankaja, to other villages, as well as to isolated buildings everywhere, to such extent as shall be deemed indispensable.

"3. That three regiments of Cossacks may be immediately placed at the disposal of the civil administration for the quarantine service.

"4. That all outlays necessary for the execution of the measures above referred to, and to meet the expenses of all measures that may be required by the present epidemic, may be charged to the account of the imperial treasury."



MAP OF THE DISTRICT INFECTED BY PLAGUE.

[The lines a a represent the military cordon drawn around the infected villages; and b b the protective cordon maintained around Zarizin, an important commercial point and terminus of the Russian railway system. The village of Wetljankaja was the original and principal center of infection.—*Bulletin of Public Health.*]

It was the unanimous conclusion that "the plan of burning the colony of Wetljankaja (the center of the infection) is proposed after a thor-

ough examination of the question, and from a conviction of the indispensable necessity of so radical a measure for the extirpation of the disease in the locality where it first appeared—the committee having subsequently heard the opinion of the physicians present, both with regard to the measure in question, and in general in relation to the means which have been shown by science and experience to be best adapted to put a stop to an epidemic, and to prevent it from spreading.”

In addition to the irregular troops mentioned above, bodies of infantry were placed at the disposal of the civil establishments, and unlimited credit was opened to meet all expenses from the Treasury. His Majesty the Emperor sent a special commissioner plenipotentiary. A commission was appointed to act in the matter, composed of medical specialists, whose duty it was to study the subject of the progress of the epidemic, and the proper means of stamping it out, and purifying the localities

measures adopted against it; and the instructions were carried out as above outlined, under the direction of Aide-de-Camp General Count Louis-Melikoff, who was sent to the infected locality with the rights and privileges of a temporary governor-general. On the arrival of Count Louis-Melikoff, in March, 1879, an international sanitary council was held, composed of the most distinguished sanitarians of Europe, Professors Hirsch, Besiadetsky, Cabiadis, Petrisco, and Eichwald. By the advice of this International Council, a general sanitary cordon was established all round the province of Astrakhan, with the object of protecting Russia and neighboring countries of the empire,\* and Professor Eichwald advised that the sanitary cordon should be maintained around the infected region until the 2d of May. These measures were entirely successful, and the plague did not spread to any other place outside of the originally infected district, nor has it reappeared.



then infected or those likely to become so; and in view of the impression produced in foreign countries by the reports of the plague, they should furnish to the government reliable information concerning the epidemic, and the

The efficacy of this plan, although on a much smaller scale, has been sufficiently shown in this country. Space is not sufficient to go into details regarding it, but an opportunity

\* See map on page 291.



occurred during the summer of 1882 to test it still further. A serious epidemic of yellow fever broke out in Bagdad, Tampico, and Matamoros, Mexico, and soon spread to Brownsville, in the State of Texas. There were in a short time, out of a city of some 5,000 inhabitants, between five and six hundred persons sick of yellow fever. A general panic prevailed throughout Southwestern Texas, and refugees were leaving that part of the State in great numbers, as it was believed the infection would rapidly and certainly extend to the surrounding country. In these circumstances, an appropriation of \$100,000 having been placed at the disposal of the Treasury Department by the President, to prevent the spread of epidemics, the Governor of the State of Texas applied to the Secretary of the Treasury for assistance from the General Government; and, as the exact area of the infected region was undetermined, at my suggestion a cordon was immediately established from Corpus Christi, on the Gulf, to Laredo, on the Rio Grande, along the line of the Texas and Mexican Railway. No person was allowed to pass this cordon until after ten days' detention at some one of the quarantine stations (represented by flags upon the accompanying map),\* that length of time being considered necessary to determine whether or not the particular person would be attacked with yellow fever. Baggage was not allowed to cross the line upon any pretext. A hospital was established in the city of Brownsville, a dispensary opened, and experienced physicians and nurses sent there, who were constantly employed in the treatment of the poor, and all persons unable to pay were treated and cared for at the public expense. These physicians also aided the health authorities of the city in carrying out sanitary measures, including the fumigation of houses.

As soon as practicable after opening the hospital, an inner protection cordon was established, thirty miles from Brownsville, the original cordon having been one hundred and eighty miles distant. Perfect liberty was allowed to the inhabitants of the infected city to leave at any time, and they were encouraged to scatter in camps; but they were not allowed to cross the cordon until after personal detention of ten days, and fumigation of their wearing-apparel; and, as in the case of the outer cordon, the crossing of baggage was positively interdicted. It was intended to remove the upper cordon between Laredo and Corpus Christi within ten days after the formation of the inner one, which extended from Santa Maria, on the Rio Grande, to the mouth of the Sol Colorado; but it was retained for several days longer, as certain of the refugees who had left Brownsville prior to the establishment of the Colorado cordon developed yellow fever. They were quarantined in the camps where they were, and their infected bedding and baggage burned. The fever continued its

spread and devastation on the Mexican side of the Rio Grande, and Reynosa, Camargo, Mier, and Guerrero successively became infected. It was then found necessary to protect the entire line of the Rio Grande, from Laredo to Santa Maria, a distance of nearly five hundred miles, by a cordon. The upper cordon, from Laredo to Corpus Christi, was then removed, and the line re-established along the Rio Grande, and the crossing-places carefully guarded; and, although the towns in Mexico were greatly devastated by the disease, there was no extension of it in Texas: on the contrary, it was confined to the limited district where it first appeared, bounded by the Colorado cordon on the one hand and the Gulf of Mexico upon the other. The Mexicans, seeing the good effects of the sanitary cordon in the United States, followed the example, and established quarantine stations in Mexico, guarding against the infected towns; and there, too, the quarantine proved successful, and arrested the spread of the disease. The Governor, the State Health Officer, and the State officers generally, assisted the work of the Government by all the means at their command. It was, however, opposed by the mayor of the city. In July, a few cases of yellow fever appeared in Pensacola, Fla., and later the disease became epidemic, and, as in Texas, a general panic prevailed. The villages and towns surrounding Pensacola established a rigid quarantine against it, no person from that city being allowed to enter except after proper detention and fumigation. In consequence of this, the towns that had thus protected themselves by the quarantine were not infected, and the disease did not spread, while the places adjoining, that did not quarantine against Pensacola, had the fever. The Government also protected its navy-yard, which joins the city of Pensacola, by means of a sanitary cordon and non-intercourse with the city during the prevalence of the epidemic, and it, too, escaped. With these facts and this experience to guide us, it may be safely asserted that with proper management it is possible to prevent the spread of epidemic diseases from one locality to another.

To prevent the recurrence of epidemics, it is necessary to adopt the same measures as those recommended in the beginning to prevent its original introduction. It is, that all fomites should be either carefully and well fumigated or destroyed, and the utmost cleanliness should be enjoined; and if it were possible to do so, as in the case of Russia, houses that are notoriously infected should be burned and their owners compensated from the public funds. It is greatly to be feared that the failure to burn infected bedding and clothing in Texas and Mexico may result in the reappearance of the yellow fever during the coming season. This disaster may be prevented if timely action be taken. It is, however, owing to the political constitution of the country, beyond the con-

\* See page 292.

trol or action of the officers of the United States.

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*Supervising Surgeon-General,  
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**EUROPE, AREA OF.** A very comprehensive work on the area of Europe has been published, during 1882, by General Strelbitzky, of the Russian general staff, under the auspices of the Central Statistical Committee of Russia. It contains estimates not only of the land surface of the various countries, but also of the islands in the adjoining waters, the areas of the basins of the rivers, the areas covered by lakes both on the mainland and on the islands, also the areas of islands in the lakes, etc. In this work he estimates the total area of Europe at 10,410,486 square kilometres, or 3,865,210 English square miles, which are divided as follow among the twenty-three countries occupying Europe :

COUNTRIES.	Square miles.	Per cent of the total area of Europe.
Russia.....	2,129,289	54.9
Sweden and Norway.....	299,625	7.8
Austria-Hungary.....	241,563	6.3
Germany.....	203,502	5.4
France.....	205,935	5.3
Spain.....	198,294	5.1
Turkey.....	180,140	4.6
Great Britain.....	121,466	3.2
Italy.....	111,410	2.9
Denmark.....	54,902	1.4
Roumania.....	50,736	1.3
Portugal.....	34,420	.9
Greece.....	19,815	.5
Servia.....	18,761	.5
Switzerland.....	15,978	.4
Netherlands.....	13,741	.3
Belgium.....	11,375	.3
Montenegro.....	3,630	.09
Andorra.....	175	.004
Lichtenstein.....	61	.002
San Marino.....	33	.0003
Monaco.....	9	.0002

Of the total area of Europe, the continent contains 3,608,750 square miles. The surface of the islands, which is about one fourteenth that of the continent, is 256,560 square miles, and is divided as follows among the different waters of Europe :

Islands in	Sq. miles.	Islands in	Sq. miles.
Atlantic Ocean.....	168,574	Adriatic Sea.....	1,296
Arctic Ocean.....	88,605	White Sea.....	191
Mediterranean Sea.....	82,522	Sea of Marmora.....	70
Baltic Sea.....	12,753	Sea of Azov.....	41
North Sea.....	2,487	Black Sea.....	21

Great Britain, which, with an insular territory of 121,464 square miles, possesses only two square miles of mainland, is followed by Denmark with 45,401 square miles of islands and 9,501 square miles of mainland. The insular territory of the other countries is as follows :

COUNTRIES.	Sq. miles.	COUNTRIES.	Sq. miles.
Russia.....	42,370	Spain.....	1,991
Italy.....	19,383	Austria.....	1,272
Norway.....	8,583	Germany.....	1,029
Greece.....	3,871	Netherlands.....	683
Turkey.....	3,920	Portugal.....	17
France.....	3,656	Roumania.....	0.4
Sweden.....	3,040		

The principal islands of Europe and their area are as follow :

ISLANDS.	In what waters.	Belonging to	Sq. miles.
Great Britain.....	Atlantic.....	Great Britain.....	84,088
Iceland.....	Atlantic.....	Denmark.....	89,545
Nova Zembla.....	Arctic.....	Russia.....	85,164
Ireland.....	Atlantic.....	Great Britain.....	32,388
Sicily.....	Mediterranean.....	Italy.....	9,560
Sardinia.....	Mediterranean.....	Italy.....	9,095
Corsica.....	Mediterranean.....	France.....	3,422
Candia.....	Mediterranean.....	Turkey.....	3,317
Zealand.....	Baltic.....	Denmark.....	2,636
Vaigats.....	Arctic.....	Russia.....	1,429
Euboea.....	Mediterranean.....	Greece.....	1,380
Majorca.....	Mediterranean.....	Spain.....	1,352
Kalguet.....	Arctic.....	Russia.....	1,350
Gotland.....	Baltic.....	Sweden.....	1,131
Fünen.....	Baltic.....	Denmark.....	1,136
Oesel.....	Baltic.....	Russia.....	1,010
Hindoe.....	Atlantic.....	Norway.....	847
Lewis.....	Atlantic.....	Great Britain.....	838
Senjen.....	Atlantic.....	Norway.....	612
Skye.....	Atlantic.....	Great Britain.....	592
Faroe.....	Atlantic.....	Denmark.....	514
Aland.....	Baltic.....	Sweden.....	510
Laaland.....	Baltic.....	Sweden.....	444
Dagoe.....	Baltic.....	Russia.....	371
Soroe.....	Atlantic.....	Norway.....	367
Mainland.....	Atlantic.....	Great Britain.....	362
Rügen.....	Baltic.....	Germany.....	343
Langöen.....	Atlantic.....	Norway.....	342
Müll.....	Atlantic.....	Great Britain.....	302
Minorca.....	Mediterranean.....	Spain.....	293
Vaagoe.....	Atlantic.....	Norway.....	290
Islay.....	Atlantic.....	Great Britain.....	273
Corfu.....	Mediterranean.....	Greece.....	273
Ringvadsee.....	Atlantic.....	Norway.....	273

The length of the principal rivers (in English miles), and the area of their basins (in square miles), are as follow :

RIVERS.	Length.	Area of basin.
Volga.....	1,973	563,802
Danube.....	1,528	815,436
Dnieper.....	1,061	208,462
Don.....	973	166,127
Dwina.....	357	141,077
Petchora.....	919	127,225
Neva.....	34	111,517
Rhine.....	708	75,796
Vistula.....	595	73,905
Elbe.....	611	55,841
Loire.....	543	46,755

The lakes of Europe cover an area of 84,829 square miles—that is, about 2 per cent of the total area of the continent. Of this number, 83,585 square miles are on the mainland and 1,244 square miles on the islands. The area covered by lakes in each country is as follows :

COUNTRIES.	On mainland.	On islands.	Total.
Russia.....	58,660	106	58,766
Sweden.....	14,276	18	14,294
Norway.....	8,951	...	8,951
Germany.....	2,198	...	2,198
Great Britain.....	...	1,011	1,011
Italy.....	775	89	814
Austria-Hungary.....	708	...	708
Turkey.....	696	...	696
Roumania.....	589	...	589
France.....	580	...	580
Switzerland.....	488	...	488
Portugal.....	201	...	201
Greece.....	176	8	179
Netherlands and Luxemburg.....	166	...	166
Denmark.....	94	68	162
Montenegro.....	75	...	75
Belgium.....	2	...	2

These lakes contain 3,037 square miles of islands, of which 2,702 square miles are in Russia, 322 square miles in Sweden, 12 square miles in Portugal, and 1 square mile in Montenegro. The largest lakes in Europe are as follow :



LAKES.	COUNTRIES.	Sq. miles.
Ladoga.....	Russia.....	7,000
Onega.....	Russia.....	8,765
Wener.....	Sweden.....	2,498
Piepus.....	Russia.....	1,866
Vettern.....	Russia.....	753
Saima.....	Russia.....	680
Mälaren.....	Sweden.....	651
Pajana.....	Russia.....	609
Enare.....	Russia.....	549
Sego.....	Russia.....	481
Beloe.....	Russia.....	434
Topozero.....	Russia.....	411
Ilmen.....	Russia.....	354
Vonig.....	Russia.....	332
Imandra.....	Russia.....	329
Sinele.....	Roumania.....	256
Balaton.....	Austria-Hungary.....	245
Kovdo.....	Russia.....	225
Geneva.....	Switzerland and France.....	221
Constance.....	Germany, Austria, and Switz- erland.....	208
Guilmar.....	Sweden.....	202
Kunto, middle lake.....	Russia.....	190
Wodlo.....	Russia.....	181
Valldi Commacchio.....	Italy.....	167
Yogo.....	Russia.....	165
Keret and Vargi.....	Russia.....	156
Kubinsk.....	Russia.....	152
Garda.....	Italy.....	141
Latcha.....	Russia.....	141
Neusiedl.....	Austria-Hungary.....	137
Kunto, upper lake.....	Russia.....	112
Virtz-Yaroi.....	Russia.....	107
Kunto, lower lake.....	Russia.....	91
Neufchâtel.....	Switzerland.....	89
Seligher.....	Russia.....	84
Maggiore.....	Italy.....	81
Como.....	Italy.....	59

Lough Neagh, in Ireland, is not enumerated above, as not being on the Continent. It contains 153 square miles, and ranks twenty-sixth in the list of lakes of Europe.

Among the most important sea-basins, that of the Caspian embraces 724,571 square miles. It is followed closely by that of the Baltic, with 671,818 square miles. The basin of the Black Sea contains 621,946 square miles; that of the Arctic Ocean, including the White Sea, 494,272 square miles; of the Atlantic, 354,772 square miles; of the Mediterranean, 236,889 square miles; of the Sea of Azov, 201,467 square miles; of the North Sea, 195,280 square miles; of the Adriatic, 91,522 square miles; and of the Sea of Marmora, 1,636 square miles.

The areas of the seas of Europe are estimated as follow, by General Strelbitzky:

SEAS.	Area inclusive of islands.	Area exclusive of islands.
Mediterranean, inclusive of the Jonian Sea and the Grecian Archipelago.....	975,008	915,749*
Adriatic.....	52,216	50,918
Marmora.....	4,497	4,427
Black.....	163,712	163,691
Azov.....	14,520	14,479
Baltic, inclusive of Cattegat and Skager Rack.....	184,496	171,743
North Sea.....	207,037	204,550
White Sea.....	82,472	82,281
Total.....	1,618,958	1,557,582

\* The figures given for the islands of the Mediterranean in another part of this article are 82,522 square miles. But this embraces the islands belonging to Europe only. This sea also contains 6,743 square miles of islands belonging to Asia and Africa, making a total of 89,265 square miles of islands in the Mediterranean.

† As the North Sea has no natural boundaries, geographers are forced to fix arbitrary ones. Those assumed by General

The Baltic, of all the seas of Europe, possesses the longest coast-line. The length of its coasts is 11,833 miles, of which Russia and Sweden possess nearly equal parts, 4,184 miles for the former and 5,731 miles for the latter. Germany possesses 1,366 miles, and Denmark 552 miles. The coast-line of the Mediterranean is not much less than that of the Baltic, being 11,272 miles long, of which number, however, 6,351 miles only belong to Europe. This number is divided as follows among the different European states: Greece, 1,841 miles; Turkey, 1,412 miles; Italy, 1,472 miles; Spain, 1,078 miles; France, 539 miles; Great Britain, 9 miles. The Adriatic has a coast-line of 2,396 miles, of which 1,243 miles belong to Austria, 874 miles to Italy, 249 miles to Turkey, and 30 miles to Montenegro. The European coast-line of the Black Sea is 1,776 miles long, of which 1,249 miles are in Russia, 376 miles in Turkey, and 151 miles in Roumania; that of the Caspian is 2,094 miles, and that of the Sea of Marmora 252 miles. The Sea of Azov has a circumference of 913 miles. The North Sea has a coast-line of 4,418 miles, of which 3,033 miles belong to Norway, 647 miles to the Netherlands, 460 miles to Germany, 178 miles to Denmark, 53 miles to Belgium, and 47 miles to France. On the Atlantic, Europe has a coast-line almost equal in length to that on the Baltic, in all 11,724 miles, of which 7,104 miles belong to Norway, 2,265 miles to France, 1,579 miles to Spain, and 776 miles to Portugal. The Arctic Ocean and the White Sea together have a coast-line of 6,542 miles, of which 5,632 miles are in Russia and 910 miles in Norway. The entire coast-line of the different countries of Europe we find to be as follows:

COUNTRIES.	Miles.	COUNTRIES.	Miles.
Sweden and Norway.....	16,775	Portugal.....	776
Russia.....	14,072	Denmark.....	730
France.....	2,851	Netherlands.....	647
Spain.....	2,637	Roumania.....	151
Italy.....	2,346	Belgium.....	53
Turkey.....	2,239	Montenegro.....	30
Greece.....	1,841	Great Britain.....	9
Germany.....	1,826		
Austria-Hungary.....	1,243	Total.....	48,299

The United Kingdom, which is not included in the above, has a coast-line of 7,986 miles, of which 4,978 miles belong to Great Britain, and 3,008 to Ireland. If we add to the 48,298 miles of coast-line the boundary between Russia and Asia, 3,548 miles, we get for the entire perimeter of the continent 51,846 miles.

The area of the principal gulfs and bays of Europe is as follows:

Gulfs and bays.	Sq. miles.	Gulfs and bays.	Sq. miles.
Bay of Biscay.....	68,318	Gulf of Tarento.....	4,478
Gulf of Bothnia.....	43,276	Gulf of Tcheskaya.....	4,308
Zuyder Zee.....	16,583	Gulf of Riga.....	2,910
Gulf of Finland.....	11,441	Gulf of Venice.....	2,509
Gulf of Lyons.....	6,592	Gulf of Salonica.....	2,789
Gulf of Onega.....	6,827		

Strelbitzky are as follow: On the west, the Strait of Dover, the eastern coast of Great Britain, the Orkney Islands, and the Shetland Islands; on the north, a straight line passing from the northern point of the Shetland Islands to the peninsula of Stadland, on the western coast of Norway; on the east, the coast of Norway to the Naaze, and from this point to Nissum Flord, on the western coast of Jutland; and, on the south, the continent of Europe to the Strait of Dover.

The narrowest strait is the Bosphorus, the width of which at Constantinople is about 550 yards. The Little Belt, between the Island of Fünen and Jutland, is 880 yards wide. In the Dardanelles the European shore is three quarters of a mile distant from Asia. The sound between Sweden and Zealand has a width of  $1\frac{1}{2}$  mile. The Calmar Sound, between Sweden and the Island of Oeland, is nearly 2 miles wide; the Strait of Messina, 2 miles; that of Jongarsky Schær, between the Island of Vaigats and Russia, nearly  $2\frac{1}{2}$  miles; that of Yenikale 2.6 miles; Pentland Firth, between Scotland and the Orkney Islands, 4.3 miles. The Strait of Bonifacio, between Corsica and Sardinia, has a width of 7 miles; the Great Belt, between Fünen and Zealand, a width of 10 miles; and the North Channel, between Ireland and Scotland, a width of 12 miles. The Strait of Gibraltar has a width of 20.4 miles at the fortress, but its least width is 10.5 miles. The Strait of Kara, between Nova Zembla and Vaigats, is 23.8 miles wide, the English Channel 25 miles, the Mineh 26.5 miles, the Strait of Taranto 33.6 miles, and St. George's Channel 48 miles.

EVANGELICAL ASSOCIATION. The following is a summary of the statistics of the Evangelical Association, as they are published in the "Christian Family Almanac" for 1883:

CONFERENCES.	Itinerant preachers.	Churches.	Members.
East Pennsylvania.....	69	1914	14,867
Central Pennsylvania.....	75	1954	12,055
Erie.....	31	40	2,998
Ohio.....	54	1364	7,746
Pittsburg.....	63	133	7,746
Kansas.....	88	264	8,512
Platte River.....	5	2	634
Nebraska.....	17	11	938
New York.....	35	564	4,252
South Indiana.....	22	36	2,250
Indiana.....	37	1014	5,792
Michigan.....	46	77	5,542
Illinois.....	87	125	10,571
Des Moines.....	34	264	8,076
Iowa.....	49	50	3,724
Canada.....	40	73	5,043
Wisconsin.....	65	139	10,355
Atlantic.....	21	21	2,339
Minnesota.....	50	69	4,813
Pacific.....	11	13	826
Germany.....	35	20	4,477
Switzerland.....	19	18	3,471
	926	1,5764	117,027

Number of Sunday-schools, 2,007, with 22,126 officers and teachers, and 133,361 scholars; number of baptisms during the year, 1,414 of adults, and 8,485 of children; number of local preachers, 619; probable value of churches, \$3,439,502; number of parsonages, 475, having a probable value of \$480,161. Amount of "conference contributions," \$5,641; of contributions for missions, \$100,655; of contributions for the Sunday-School and Tract Union, \$2,512. The tables show an increase of 3,156 members during the year. The mission in Japan returns 1 itinerant preacher, 1 local preacher, 2 chapels, 3 regular preaching-places, 51

native members, 117 scholars and 15 officers and teachers in four Sunday-schools, 72 scholars in two day-schools, and, during the year, 26 baptisms of adults, and 1 infant baptized. The church has a publishing house at Cleveland, Ohio, where one English and one German general religious paper and papers for children and Sunday schools in both languages are published; and two papers are published at Stuttgart, Germany. The Ebenezer Orphan Institute, Flat Rock, Ohio, cares for children till they are sixteen years old.

EXPLOSIONS, BOILER. EXPERIMENTS OF D. T. LAWSON.—In the "Annual Cyclopædia" of last year an account was given of the experiments of Mr. Daniel T. Lawson upon the explosion of boilers under conditions which have heretofore been considered as insuring safety. Since the writing of that account, Mr. Lawson has made further tests to demonstrate the value of his improvement in the construction of boilers. The matter was considered sufficiently important by the United States authorities to warrant the appointment of commissioners to witness and report upon the tests. These reports, indorsing very fully both Mr. Lawson's theory of the phenomenon and his improvement in construction, are given below, and furnish sufficient information of the subject to enable the public to judge of it:

PITTSBURG, PA., March 23, 1882.

Hon. Charles J. Folger, Secretary United States Treasury, Washington, D. C.

SIR: In an official letter from the Supervising Inspector-General of Steam-Vessels, dated Washington, D. C., February 10, 1882, we were informed of our appointment by you to witness and report upon experiments to be made at Munhall, near Pittsburg, Pa., by Mr. D. T. Lawson, illustrating his theory of steam-boiler explosions. In accordance with these instructions, we proceeded to the scene of the experiments, February 14, 1882, three days prior to the first test, for the purpose of making a careful examination of the form, construction, and dimensions of the boilers, and to ascertain the thickness and tensile strength of the plates used in their construction.

We found two cylindrical boilers, five feet and nine inches in length and thirty inches in diameter, one of which was a plain cylindrical boiler without flues or tubes, with an iron rod one inch in diameter, which served as a stay or brace, running through the center and fastened at either head by means of nuts.

The thickness of the shell was three sixteenths of an inch, and the material was iron, with a tensile strength of 61,449 pounds per square inch of section. Two plates were used in the construction of the shell, with the longitudinal seams on opposite sides above the fire-line. The heads were made of the same material as that of the plates in the shell, but were three eighths of an inch in thickness.

The other boiler was a duplicate of the above-described boiler, with the following exceptions: 1. A man-head was put in one of its heads, necessitated by the manner in which the boiler was constructed. 2. An iron plate, three sixteenths of an inch in thickness, was flanged around its edges, and riveted along the entire length of both sides of the shell and across the heads on the inside of the boiler. The side flanges contained seventy-four five-eighths rivets each, and those across the heads contained thirteen five-eighths rivets each. The plate was semicircular in form and attached to the sides of the shell about the center, and curving upward to within eight inches of the top



of the boiler. This plate was perforated with holes three sixteenths of an inch in diameter, at intervals of eight inches, for the purpose of admitting the steam from the water below gradually to the steam-space above. This plate is Mr. Lawson's invention, and he claims that it will prevent concussion in the boiler when the steam is drawn off suddenly by opening the throttle-valve, or suddenly cutting it off from the cylinder, and thus insure greater safety in the management of steam-boilers.

The boilers used in making these experiments were manufactured expressly for that purpose, and had never been used before. The first boiler placed in position for the test was the one containing the plate, or "diaphragm," as it is called. To this boiler was attached a three-and-a-half-inch steam-pipe, sixteen feet in length, with a discharge-valve attached, sixteen feet from the boiler. A steam-pipe four feet in length—including two elbows—and three and a half inches in diameter, formed a connection between the valve and a cylinder, the diameter of which was eight inches and length four feet.

A steam-gauge, with a pipe twelve feet in length, was placed on the inside of a bomb-proof. From the inside of this bomb-proof the discharge-valve was operated by means of ropes. Fire was placed under the boiler, with nineteen inches of water to start with. When steam was generated, the discharge-valve was suddenly opened at certain intervals, discharging the steam into the cylinder. These operations were continued until the pressure in the boiler had reached 225 pounds to the square inch, when the discharge-valve was opened, and the material forming the joint between one of the cylinder-heads and the cylinder blew out. The discharge-valve, at the same time, proved too weak, and began leaking so badly that the test had to be abandoned. This ended the first test, February 17, 1892. The second test took place March 7, 1892. This test was made with the plain cylindrical boiler, and the discharge-valve, steam-pipe, and all other outside attachments substantially the same as they were with the other boiler during the first test. A stronger discharge-valve, however, was employed, as were also two new steam-gauges. The latter were manufactured expressly for these tests by William Kirkup & Son, of Cincinnati, Ohio. Fire was started under the boiler, and steam raised slowly. At 12.02 p. m. the steam-gauge indicated 75 pounds. In four minutes thereafter the pressure had increased 25 pounds. At this point the discharge-valve was opened, and the needle of the gauge fell five pounds, but immediately rose again to 100 pounds. From this point the pressure increased to 125 pounds in six minutes, when an attempt was made to raise the valve, but the line broke; the furnace-door was thrown open, and the fire drawn. The line was repaired, and the lever attached to the valve was lengthened, when the boiler was again fired up. At 75 pounds pressure the valve was raised, and the needle of the gauge showed the vibrations recorded in the following table:

Pressure at which the discharge-valve was raised.	Vibrations of needle of gauge below pressure in first column.	Vibrations of needle of gauge above pressure in first column.
Pounds.	Pounds.	Pounds.
75	3	2
100	4	3
110	5	5
120	8	5
165	15	10
175	19	7
185	15	15
200	12	12
210	20	12
220	20	12

At 220 pounds a leak, which had previously started around the stay-bolt in the forward head of the boiler, became so bad that the test had to be discontinued until the necessary repairs could be made. Upon examination it was discovered that the hole in the cen-

ter of the head through which the stay-bolt passed had been enlarged with a drift-pin, causing the iron in the head to crack in three places, beginning at the edge of the hole and running out into the body of the head. The defects were repaired, and on the following day, March 8th, the test was resumed, with the result as shown in the following table:

Pressure at which the discharge-valve was raised.	Vibrations of needle of gauge below pressure in first column.	Vibrations of needle of gauge above pressure in first column.
Pounds.	Pounds.	Pounds.
100	5	5
125	12	5
130	15	7

At 130 pounds a leak in the back head of the boiler, which had started around the stay-bolt, checked the draught to such an extent as to render further efforts to increase the pressure futile.

March 9th the boiler was repaired and put in good order. On the following day, March 10th, the experiments were resumed with 204 inches of water in the boiler, 54 inches above the fire-line. Steam was generated slowly, but, contrary to our advice, the pressure was run up to 200 pounds before the discharge-valve had been attempted to raise, and when an attempt was made to raise it, it was found that it had become fast to the seat; the lever attached to it broke, and practically ended the test. The steam, however, ran up to 275 pounds, when it began falling slowly, until the pressure reached a point of safety, when the fire was drawn and the boiler allowed to cool off.

March 20th, the experiments were resumed. This time the boiler with Mr. Lawson's appliance was used. A steam-gauge was attached to the boiler above and one below the diaphragm. The boiler contained 18 inches of water. Steam was generated slowly, and when the pressure had reached 50 pounds, operating the discharge-valve began with the following results:

Steam pressure at which discharge-valve was raised.	Steam-gauge above the diaphragm.		Steam-gauge below the diaphragm.	
	Needle fell below.	Needle rose above.	Needle fell below.	Needle rose above.
Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
50	7	7	3	00
80	10	7	4	00
100	12	7	5	3
125	15	15	8	4
150	20	20	8	7
175	15	23	10	10
200	20	20	15	00
225	30	20	12	00
230	40	30	10	00
250	25	20	10	00
275	30	25	15	00
300	40	35	15	00

When the pressure in the boiler reached 300 pounds to the square inch, it was unanimously decided that the boiler had been sufficiently tested, as we intended to cut out the diaphragm and make the final test with the same boiler. The discharge-valve was then opened and the steam allowed to escape; the fire was drawn, and when the boiler had cooled off sufficiently an examination was made. It was found that the water had been reduced to 11 inches, or 4 inches below the fire-line. The rivets, seams, and all the other parts of the boiler were critically examined, and no strain, rupture, or any other weakness, was discovered. The diaphragm was then cut out, leaving the flanges riveted to the sides of the shell and across the heads, with about three inches of the plate of which the diaphragm was constructed. The boiler was then placed in position for the final test, with 22 inches of water, 7 inches above the fire-line. When steam was raised, the discharge-valve was operated, with the following results:

Steam-pressure at which discharge-valve was raised.	Steam-gauge attached to the boiler in the steam-space.		Steam-gauge attached to the boiler in the water-space.	
	Needle fell below.	Needle rose above.	Needle fell below.	Needle rose above.
Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
100	3	0	3	0
125	2	0	8	0
150	5	0	5	0
175	4	2	8	2
200	5	0	5	0
210	3	0	8	0
225	5	0	8	0
235	Exploded.	..	..	..

When the discharge-valve was opened at 235 pounds pressure it caused an instantaneous explosion of the boiler. An examination of what was found of the wreck proved that the boiler let go at no particular place first, but that it simply blew into fragments at one and the same time. The iron which was found was torn and twisted into every conceivable shape—strips varying in size from half an inch to one inch in width, and from three inches to two feet in length, were found in every direction.

This boiler, according to the tensile strength of the iron, would have carried a pressure of 430 pounds before it would have ruptured, and when it exploded, although it had but 235 pounds pressure to the square inch in it prior to the opening of the discharge-valve at the moment of explosion, there must have been a force at least equal to 430 pounds to the square inch exerted.

What seemed most singular about this explosion was that the boiler did not tear at the seams, the weakest parts, but the tearing was pretty much all done at the solid parts of the iron, and in no particular direction.

In making the foregoing report, we have carefully refrained from obtruding any theories of our own. We have simply confined ourselves to the facts as they occurred, preferring to leave the world to draw its own conclusions.

Respectfully submitted:

JOHN FEHRENBATCH,  
U. S. Supervising Inspector of Steam-Vessels,  
GEORGE H. ATKINSON,  
U. S. Inspector of Boilers of Steam-Vessels,  
ALONZO S. BATCHELOR,  
U. S. Assistant Inspector of Boilers of Steam-Vessels.

Having been requested by the Secretary of the Treasury to make a supplemental report, giving their opinion of Mr. Lawson's theory of boiler-explosion, the commissioners did so, indorsing not only the theory in question, but the mode of boiler-construction devised by Mr. Lawson. In this report the commissioners say:

As to the merits of the claims made for Mr. Lawson's theory of steam-boiler explosions, in our opinion their validity was fully established. . . . We are convinced that the attachment to a boiler of a diaphragm such as, or similar to, the one employed while making the experiments, will, in a great measure, remove the dangers which now surround the management and use of steam-boilers. A boiler with such an apparatus attached is safer, for the reason that no concussions can take place in it. Aside from this it strengthens the boiler, and in addition thereto it produces dry steam, a great desideratum in the running of steam-engines. The experiments made have not proved the theory, held by many, that low water is the cause of boiler-explosions, to be correct.

## F

**FARMS AND LIVE-STOCK IN THE UNITED STATES.** The statistics of the number of farms in the States and Territories of

the United States, with the live-stock upon them, are shown by the following returns of the census of 1880:

### FARMS.

STATES.	1880.	1870.	1860.	STATES.	1880.	1870.	1860.
Alabama .....	135,864	67,882	55,128	Missouri .....	215,575	148,928	92,792
Arizona .....	707	172	....	Montana .....	1,519	851	....
Arkansas .....	94,433	49,424	39,004	Nebraska .....	68,387	12,801	2,789
California .....	35,934	23,724	18,716	Nevada .....	1,404	1,036	91
Colorado .....	4,506	1,738	....	New Hampshire .....	82,181	29,642	80,501
Connecticut .....	30,598	25,508	25,180	New Jersey .....	84,307	30,652	27,646
Dakota .....	17,435	1,720	123	New Mexico .....	5,058	4,480	5,086
Delaware .....	8,749	7,615	6,658	New York .....	241,058	216,238	196,990
District of Columbia .....	435	209	233	North Carolina .....	157,609	98,565	75,208
Florida .....	23,438	10,241	6,503	Ohio .....	247,189	195,968	179,889
Georgia .....	138,626	69,956	62,008	Oregon .....	16,217	7,587	5,806
Idaho .....	1,885	414	....	Pennsylvania .....	213,542	174,041	156,367
Illinois .....	255,741	202,903	148,810	Rhode Island .....	6,216	5,368	5,406
Indiana .....	194,013	161,289	131,826	South Carolina .....	93,864	51,589	38,171
Iowa .....	155,351	116,292	61,163	Tennessee .....	165,650	118,141	82,363
Kansas .....	138,561	38,202	10,400	Texas .....	174,154	61,125	42,891
Kentucky .....	166,453	113,422	90,814	Utah .....	9,462	4,008	8,695
Louisiana .....	45,292	23,451	17,823	Vermont .....	95,522	88,827	81,556
Maine .....	64,309	59,804	55,693	Virginia .....	118,517	78,549	92,605
Maryland .....	40,517	27,000	25,494	Washington .....	6,529	8,127	1,890
Massachusetts .....	38,406	26,500	35,601	West Virginia .....	62,674	89,775	....
Michigan .....	154,008	93,786	62,422	Wisconsin .....	184,322	102,904	69,270
Minnesota .....	92,856	46,500	15,181	Wyoming .....	457	175	....
Mississippi .....	101,772	68,023	42,340				
The United States .....	4,008,907	2,659,985	2,044,077				

The great increase in the number of farms from 1870 to 1880 in the Northern, Western, and Pacific States, and the Territories, is ex-

plained by the rapid settlement of those regions during the past decade. The great increase in the late slave States, especially in the



cotton region, is accounted for by the subdivision of the large plantations of ten and twenty years ago, by reason of social and industrial changes consequent on the war, and also, in the case of Florida, Arkansas, and Texas, by immigration.

The average size of farms in 1880 was 134 acres; in 1870, 153 acres; in 1860, 199 acres. The number of farms of specified sizes in the United States in 1880, as compared with 1870, was as follows:

SIZE.	1870.	1880.
Under 3 acres.....	6,875	4,852
3 and under 10.....	172,921	184,889
10 and under 20.....	294,607	254,749
20 and under 50.....	847,614	781,474
50 and under 100.....	754,221	1,032,910
100 and under 500.....	565,054	1,695,988
500 and under 1,000.....	15,873	75,972
1,000 and over.....	8,720	28,578

Important comparisons between 1880 and 1870 are given in the following statement:

	1870.	1880.
Total land in farms, acres.....	407,735,041	536,081,835
Improved land in farms, acres.....	188,921,099	254,771,042
Unimproved land in farms, acres.....	218,813,942	281,310,793
Percentage of unimproved to total land in farms.....	53.7	46.9
Value of farms*.....	\$9,262,808,861	\$10,197,096,776
Value of farming implements and machinery*.....	836,878,429	406,520,055
Value of live-stock*.....	1,525,276,457	1,500,464,609

The estimated value of all farm-productions (sold, consumed, or on hand) for 1879 was \$2,213,402,564.

#### LIVE-STOCK.

Horses.....	10,337,931
Mules and asses.....	1,512,932
Working-oxen.....	998,970
Milch-cows.....	12,443,593
Other cattle.....	22,488,590
Sheep.....	35,191,656
Swine.....	47,683,951

#### FINANCES OF THE UNITED STATES.

In reviewing the financial operations of the Government during the year 1882, the absence of congressional legislation affecting the national revenues is a noticeable feature; and, perhaps, the freedom of action which naturally followed has not been to the disadvantage of the nation. By a faithful administration of the laws already in force, and a judicious expenditure of the public funds with strict regard to economy, there has been realized a surplus revenue of \$145,000,000—an amount hitherto unparalleled in our history.

The receipts of the Government for the fiscal year ended June 30, 1882, were as follow:

From customs.....	\$220,410,730 25
From internal revenue.....	146,497,595 45
From sales of public lands.....	4,753,140 37
From tax on circulation and deposits of national banks.....	8,956,794 45
From repayment of interest by Pacific Railway Companies.....	840,554 37
From sinking fund for Pacific Railway Companies.....	796,271 42
From customs fees, fines, penalties, etc.....	1,843,348 00
From fees—consular, letters-patent, and lands.....	2,638,990 97
From proceeds of sales of Government property.....	314,959 85
From profits on coinage, bullion deposits, and assays.....	4,116,693 73
From Indian trust funds.....	5,705,243 22
From deposits by individuals for surveying public lands.....	2,052,806 36
From revenues of the District of Columbia.....	1,715,176 41
From miscellaneous sources.....	8,333,445 43
Total.....	\$403,525,250 28

The expenditures for the same period were:

\* In comparison of values between 1870 and 1880, it should be borne in mind that in the former year, gold was at an average premium of 25.3 per cent.

For civil expenses.....	\$18,042,386 42
For foreign intercourse.....	1,307,583 19
For Indians.....	9,736,747 40
For pensions.....	61,845,193 95
For the military establishment, including river and harbor improvements, and arsenals.....	43,570,494 19
For the naval establishment, including vessels, machinery, and improvements at navy-yards.....	15,032,046 26
For miscellaneous expenditures, including public buildings, light-houses, and collecting the revenue.....	34,539,237 50
For expenditures on account of the District of Columbia.....	2,330,548 37
For interest on the public debt.....	71,077,206 79
Total.....	\$257,981,439 57

Leaving a surplus of \$145,543,810.71.

Compared with the previous fiscal year, the receipts for 1882 have increased as follows: From customs, \$22,251,054.23; internal revenue, \$11,233,209.94; sales of public lands, \$2,551,277.20; tax on circulation and deposits of national banks, \$840,678.73; and miscellaneous, \$5,866,737.61; making a net increase in the receipts from all sources of \$42,742,957.71.

The expenditures during the same period show a decrease of \$20,343,982.30, as follows: In the naval establishment, \$654,625.40; interest on the public debt, \$11,431,534.39; and in civil and miscellaneous, \$8,257,822.51. There was an increase of \$17,612,534.28, as follows: In the military establishment, \$3,104,033.64; for Indians, \$3,222,586.31; and in pensions, \$11,285,914.33; making a net decrease in the expenditures of \$2,731,448.02.

The receipts from customs for the last fiscal year (\$220,410,730.25) were larger than ever before in the history of the Government; the nearest approach to a like amount being in 1872, when the collections from customs duties were \$216,370,286.77. The receipts from internal revenue (\$146,497,595.45) were the largest since 1870, during which year they amounted to \$184,899,756.49. The amount received from sales of public lands (\$4,753,140.37) was greater than for any year since 1856, when they amounted to \$8,917,644.93. The total net revenue (\$403,525,250.28) was larger

than for any previous year since 1870, when the aggregate receipts amounted to \$411,255,477.63. The receipts from duties on imports and internal revenue taxes have steadily increased for the past five years. In 1878 the revenue from customs amounted to \$130,170,680.20; and from internal revenue, \$110,581,624.74. During the same period the ordinary expenditures have materially decreased, and as the result of successfully refunding a very large portion of our national debt, the annual interest charge has been reduced \$37,294,362.

The following is a statement showing the net ordinary receipts and expenditures of the Government by calendar years, for 1881 and 1882:

	1881.	1882.
<b>RECEIPTS.</b>		
Customs.....	\$207,757,504 62	\$225,786,130 84
Internal revenue.....	143,531,925 41	145,783,153 82
Sales of public lands....	3,260,824 23	5,718,446 46
Tax on circulation of banks.....	8,497,545 09	9,161,133 23
Miscellaneous.....	19,080,484 87	22,997,737 91
<b>Total.....</b>	<b>\$382,078,533 72</b>	<b>\$409,446,612 26</b>
<b>EXPENDITURES.</b>		
Civil and miscellaneous..	\$58,213,142 44	\$64,871,480 64
War.....	42,774,998 80	44,996,957 09
Navy.....	14,768,855 93	15,001,608 90
Indians.....	6,865,307 63	10,000,099 13
Pensions.....	53,700,121 50	55,363,591 73
Interest.....	75,989,940 96	63,775,410 95
<b>Total.....</b>	<b>\$254,817,867 26</b>	<b>\$254,009,448 44</b>
<b>Surplus revenue ....</b>	<b>\$127,261,166 46</b>	<b>\$155,437,163 82</b>

As compared with the preceding calendar year, the receipts for 1882 have increased \$27,368,078.54, as follows: From customs, \$18,028,626.22; internal revenue, \$2,251,233.41; sales of public lands, \$2,457,622.23; tax on circulation and deposits of national banks, \$663,293.14; and miscellaneous, \$3,967,303.54.

The expenditures show a net decrease of \$807,918.82, owing to the large reduction in the amount required for the payment of interest on the public debt.

Comparing the fiscal year 1881 with the previous year, 1880, the receipts increased as follows: In customs revenue, \$11,637,611.42; internal revenue, \$11,255,011.59; in tax on circulation and deposits of national banks, \$1,101,144.28; in miscellaneous, \$5,359,133.81; making a total increase of revenue over previous year of \$29,352,901.10. The expenditures show a net decrease over previous year of \$6,930,070.19, the principal item of decrease being that of interest on the public debt, \$13,248,833.93.

Of the amount of surplus revenue for the year, \$14,637,023.93 remained in the Treasury at the close of the year. The remainder, \$85,432,381.05, was applied to the purchase or redemption of obligations of the United States, all of which were interest-bearing, except the comparatively small amount of \$109,001.08 of fractional notes.

The condition of the Treasury at the beginning of the present calendar year, as compared with that of 1882 on the same day, may be stated as follows:

STATEMENT SHOWING THE ASSETS AND LIABILITIES OF THE UNITED STATES TREASURY ON THE  
1ST DAY OF JANUARY, 1882 AND 1883.

	January 1, 1882.	January 1, 1883.
<b>ASSETS.</b>		
Gold coin.....	\$4,639,864 73	\$119,523,136 04
Gold bullion.....	87,977,602 65	51,981,432 85
Standard silver dollars.....	69,599,987 00	94,016,842 00
Fractional silver.....	25,063,641 48	26,521,692 20
Silver bullion.....	3,007,829 86	4,468,193 10
Gold certificates.....		25,105,080 00
Silver certificates.....	6,359,910 00	4,405,000 00
United States notes.....	25,992,799 99	28,454,394 86
National bank notes.....	5,677,691 02	6,532,020 95
Deposits held by national banks.....	13,268,097 76	13,736,099 55
Nickel and minor coins.....	395,874 90	494,899 55
Fractional currency.....	18,696 26	6,344 86
Redeemed bonds, etc.....	9,903,526 33	80,973,643 06
<b>Total.....</b>	<b>\$333,304,971 98</b>	<b>\$406,218,728 32</b>
<b>LIABILITIES.</b>		
Post-Office accounts.....	\$4,918,252 04	\$6,591,139 71
Disbursing officers.....	22,521,325 87	25,567,430 00
Fund for redemption of notes of national banks failed, in liquidation, or reducing circulation.....	29,202,678 10	38,780,354 10
Five per cent fund for redeeming national bank notes.....	16,551,073 83	14,902,361 88
Other funds in nature of trusts.....	6,127,744 61	6,458,160 50
Gold certificates.....	5,133,120 00	64,619,540 00
Silver certificates.....	68,675,230 00	72,848,660 00
Clearing-House certificates.....	9,590,000 00	9,555,000 00
Matured bonds and interest.....	25,508,231 71	26,980,940 92
Balance.....	143,112,615 82	140,163,441 71
<b>Total.....</b>	<b>\$333,304,971 98</b>	<b>\$406,218,728 32</b>

The increase in the receipts from duties on imports derived from sugar, wool, iron and steel, silk, cotton, and spirits, as compared with the preceding year, is shown by the following table:



SOURCES.	Fiscal year 1881.	Fiscal year 1882.	Increase.
Sugar, melada, and molasses.....	\$47,977,187	\$49,198,312	\$1,221,175
Wool and its manufactures.....	27,285,624	29,253,016	1,967,392
Iron and steel, and manufactures thereof.....	21,462,584	24,175,547	2,713,013
Manufactures of silk.....	19,038,665	22,638,187	3,594,472
Manufactures of cotton.....	10,825,115	12,227,108	1,401,988
Wines and spirits.....	6,469,643	6,771,483	301,840

The increase in the receipts from internal revenue for the same period has been as follows:

SOURCES.	Fiscal year 1881.	Fiscal year 1882.	Increase.
Spirits.....	\$67,153,974	\$63,873,408	\$2,719,434
Tobacco.....	42,854,991	47,391,988	4,536,997
Fermented liquors.....	13,700,241	16,153,920	2,453,679
Banks and bankers.....	3,762,208	5,253,458	1,491,250
Miscellaneous.....	7,758,496	7,850,497	92,001

The surplus revenue, amounting in the fiscal year 1882 to \$145,543,810.71, and for the calendar year to \$155,437,163.82, could only be applied under existing laws to the reduction of the outstanding principal of the national debt.

The changes which have taken place during the year ended December 31, 1882, are shown in the following statement of the condition of the public debt at the beginning and close of the year.

CHARACTER.	December 31, 1881.	December 30, 1882.
Bonds at 4½ per cent.....	\$250,000,000 00	\$250,000,000 00
Bonds at 4 per cent.....	738,772,550 00	738,950,550 00
Bonds at 3½ per cent.....	551,156,800 00	99,326,200 00
Bonds at 3 per cent.....	675,250 00	289,563,950 00
Refunding certificates, 4 per cents.....	14,000,000 00	404,750 00
Navy pension fund.....	14,000,000 00	14,000,000 00
Interest accrued on the above loans.....	14,814,377 85	12,067,188 54
Debt on which interest has ceased.....	11,528,265 26	14,887,015 26
Interest on matured debt.....	714,955 81	446,514 83
Demand and legal-tender notes.....	346,740,936 00	346,740,811 00
Clearing-House certificates.....	9,590,000 00	9,585,000 00
Gold certificates.....	5,188,120 00	61,619,840 00
Silver certificates.....	68,675,230 00	72,348,660 00
Fractional currency.....	7,075,926 92	7,022,074 17
Unclaimed Pacific Railway interest.....	7,256 51	5,339 96
Total.....	\$2,013,869,697 85	\$1,920,467,693 31
Less cash in the Treasury.....	253,377,980 76	312,924,016 47
Net debt.....	\$1,765,491,717 09	\$1,607,543,676 84

As will be seen by the above statement, the principal of the public debt bearing interest has been reduced during the last year \$162,289,150; the total principal has been reduced \$95,884,727.75. The reduction of the total debt, less cash in the Treasury, during the same period was \$157,948,040.25, with a corresponding reduction in the annual interest charge of \$7,127,902.50.

The refunding operations of the Government for 1882 were limited to the exchange, under authority of section 11 of an act approved July 12, 1882, of the "continued 3½ per cents" issued by Secretary Windom, for a like amount of 3 per cent bonds.

Soon after the opening of the first session of the Forty-seventh Congress, a bill was introduced in the Senate by Mr. Sherman, authorizing the issue of \$300,000,000, in 3 per cent bonds, payable at the pleasure of the United States after the 1st of January, 1887, the money received therefor to be applied solely to the redemption of bonds of the United States bearing 3½ per cent interest. The debate on this bill took a very wide range, extending through a period of several weeks. Although its oppo-

nents willingly admitted that the Government was now in a position to dictate terms to its creditors, and to float its public debt at the lowest rate of interest at which any nation had been able to borrow money, yet the rate proposed, was so low, that the measure, even if adopted, would ultimately prove to be a failure. While admitting that our credit was established upon a firm basis, and stood unrivaled in the markets of Europe; that our bonds were in demand both at home and abroad by investors who prefer a perfectly safe investment to one of a speculative character; that our immense resources and financial vigor, as shown by the steady reduction of the public debt and the rate of interest at each successive funding operation, was of itself sufficient to prove that our securities had no equal; notwithstanding these facts, a strong effort was made to defeat the bill by incorporating an amendment providing that these 3 per cent bonds should be the *only* bonds receivable as security for national-bank circulation, or as security for the safe-keeping and prompt payment of the public money deposited with such banks, so far as the whole amount issued would enable the

banks to give such security. The bill as amended passed the Senate February 3, 1882. No action having been taken by the House up to a late date, the provisions of the bill were attached by the Senate to the act providing for the extension of the charters of national banking associations, and became a law July 12, 1882. Section 11 of this act reads as follows:

That the Secretary of the Treasury is hereby authorized to receive at the Treasury any bonds of the United States bearing three and a half per centum interest, and to issue in exchange therefor an equal amount of registered bonds of the United States of the denominations of fifty, one hundred, five hundred, one thousand, and ten thousand dollars, of such form as he may prescribe, bearing interest at the rate of three per centum per annum, payable quarterly at the Treasury of the United States. Such bonds shall be exempt from all taxation by or under State authority, and be payable at the pleasure of the United States: *Provided*, That the bonds herein authorized shall not be called in and paid so long as any bonds of the United States heretofore issued bearing a higher rate of interest than three per centum, and which shall be redeemable at the pleasure of the United States, shall be outstanding and uncalled. The last of the said bonds originally issued under this act, and their substitutes, shall be first called in, and this order of payment shall be followed until all shall have been paid.

It will be noticed that these bonds were to be issued redeemable at the pleasure of the United States, but not until after all bonds bearing a higher rate of interest, and thus redeemable, are redeemed or called; and they are to be called for payment in an inverse order to that in which they are issued; those last dated and numbered being the first to be redeemed.

Under this authority the exchange of "3½ per cent continued bonds" began August 1st, and continued until September 20th, when operations were temporarily suspended in order to allow the preparation of the schedules and checks for the dividend due November 1st on the 3½ per cents which had not been exchanged, as well as upon the new issue of 3 per cents. Up to the date of the suspension of operations, 3½ per cents to the amount of \$259,370,500 were exchanged for a like amount of 3 per cents. The interest on the bonds surrendered was adjusted to August 1, 1882, and the 3 per cent bonds exchanged therefor carried interest from that date. The total amount of 3 per cent bonds issued to December 30, 1882, was \$289,563,950. The reduction in the annual interest charge by reason of these exchanges is \$1,447,819.75.

The following is a statement of the calculated average rates of interest to investors in the 4½ and in the 4 per cent securities of the United States, at their market values during the months of January and July of each year, from 1877 for the 4½ per cents, and from 1878 for the 4 per cents, to and including July, 1882, as prepared by Professor E. B. Elliott, Actuary of the Treasury Department.

It will be seen that the decline has been gradual from 4.425 to about 2.895.

YEAR.	Four and a half per cents of 1891.		Four per cents of 1907.	
	January.	July.	January.	July.
	Per cent.	Per cent.	Per cent.	Per cent.
1877...	4.425	4.380		
1878...	4.218	4.162	4.027	4.022
1879...	4.011	3.912	4.029	3.891
1880...	3.822	3.527	3.756	3.502
1881...	3.198	2.885	3.274	3.074
1882...	2.828	2.895	2.998	2.900

But once before in the history of the Government has its revenue so far exceeded its expenditure as to cause any feeling of anxiety in the minds of its financial officers as to the best disposition to be made of the surplus. In 1836 the country was free from debt, and during a period of unexampled prosperity, aided by a strong speculative mania for the purchase of the public lands, the surplus revenue was very large, too much so to be allowed to remain in the Treasury. On June 23, 1836, an act was passed which provided that, at the commencement of the following year, the surplus revenues in the Treasury in excess of \$5,000,000 should be distributed among the several States according to their respective representation in the Senate and House of Representatives. The amount so distributed was \$28,104,864.91. The act provided for a distribution in four equal installments, but the fourth installment was never paid over. Within a brief period the condition of affairs was changed. The good times of 1835-'36 were succeeded in 1837 by the most extraordinary depression and panic. At the close of the year 1837 it was not only impossible to pay to the States the fourth installment of the surplus, but even to meet the current expenses of the Government from its ordinary revenues. (See INDEBTEDNESS OF THE STATES, page 398.)

At the present time, and under existing laws, we have no reason to fear such a result from any attempt to dispose of the rapidly increasing surplus revenues of the Government. All the circumstances are different. We have a large outstanding debt, and the surplus over and above the amount required for the payment of the ordinary expenditures of the Government may well be applied to the extinguishment of that debt, until Congress shall provide by suitable legislation for a reduction of taxation, by a revision of the tariff laws and a corresponding change in our internal revenue system of taxation.

The Secretary of the Treasury, in his annual report for 1881, called the attention of Congress to this subject, and suggested the propriety of new legislation, looking to a reduction of the surplus revenue by a reduction of taxation. He said:

"It is a matter of gratulation that the business of the country so thrives as to endure the onerous taxation that is upon it, and yet grow in volume, and apparently in profits, and yield to the Government a surplus over its needs. The result upon the public revenue is to em-



barrass this department in disposing of the surplus in lawful way, and with regard to economy. While it is asserted that there is stringency in the money market, and that the business community is in straits, the call of this department for millions of bonds is slowly heeded, and its offer to purchase bonds is not in full accepted. There is another way in which to dispose of the surplus, namely, to enter the markets and buy bonds at the current rates. Calculations of experts show that, at the premium that now rules upon the 4 and 4½ per cent bonds, this could not be done without a loss to the Treasury, which it is of doubtful propriety to make. And it is almost certain that an announcement of a purpose so to do would enhance the market value of those bonds. Meanwhile the daily receipts from the community by the Treasury continue, the surplus over its needs increases, and money lies idle. It seems that the plan most just, for giving relief, is to reduce taxation, and thereby diminish receipts and surplus.

"The rapid reduction of the public debt and the increase of the surplus in the Treasury present the question to Congress whether there should not be a reduction in the taxation now put upon the people. It is estimated that, if the present ratio of receipt and expenditure is kept up, the public debt now existing may be paid in the next ten years. In view of the large sum that has been paid by the present generation upon that debt, and of the heavy taxation that now bears upon the industries and business of the country, it seems just and proper that another generation should meet a portion of the debt, and that the burdens now laid upon the country should be lightened. It is to be considered, too, whether the seeming affluence of the Treasury does not provoke to expenditure larger in amount than a wise economy would permit, and upon objects that would not meet with favor in a pinched or moderate condition of the Federal Exchequer. In some quarters there is already talk of an overflowing Treasury, and projects are put forth for lavish expenditure, not only to the furtherance of public works of doubtful legitimacy and expediency, but in aid of enterprises no more than *quasi*-public in character. Can a Government be justly said to have an overflowing Treasury when there is an outstanding debt against it greater than it could pay if lawfully presented, and when its means of payment in the future must be taken from its denizens by burdensome taxation? And is it a beneficial exercise of governmental power to raise money by taxation in greater sums than the lawful demands upon the Government require, when those demands are of themselves a heavy burden upon the industry and business of the country?"

And again, in his annual report for 1882, he said: "The Treasury Department was created by act of Congress, chapter xii, of the year 1789. By the second section it was made the duty of

the Secretary 'to digest and prepare plans for the *improvement* of the revenue.' The word *improvement* meant enlargement. The need was for more revenue, and the lack was of subjects from which it might be taken. In that sense that duty is now without care. The times have changed. What now perplexes the Secretary is not wherefrom he may get revenue and enough for the pressing needs of the Government, but whereby he shall turn back into the flow of business the more than enough for those needs that has been drawn from the people.

"It has not often occurred in public financial history that embarrassment has arisen through superabundance of revenues. The condition of the country in that respect, while it illustrates its almost boundless resources, and establishes its credit beyond a question, presents difficulties of grave character.

"The accumulation in the Treasury of a large surplus, which must occur unless immediate measures are enacted for a reduction of the revenues, is not to be placidly contemplated, and the question confronts us, In what manner may it best be prevented?"

Soon after the beginning of the first session of the Forty-seventh Congress, a bill was introduced by Senator Morrill, of Vermont, authorizing the appointment of a commission to investigate the subject of the tariff and internal revenue laws. (See CONGRESS, UNITED STATES; also TARIFF REVISION.) A long and tedious debate followed, resulting in the passage of an act, approved May 15, 1882, creating a commission to consist of nine members, to be appointed by the President, from civil life, subject to confirmation by the Senate, their duties, as prescribed in the third section of the act, being as follow:

It shall be the duty of said commission to take into consideration and to thoroughly investigate all the various questions relating to the agricultural, commercial, mercantile, manufacturing, mining, and industrial interests of the United States, so far as the same may be necessary to the establishment of a judicious tariff, or a revision of the existing tariff, upon a scale of justice to all interests, and for the purpose of fully examining the matters which may come before it. Said commission, in the prosecution of its inquiries, is empowered to visit such different portions and sections of the country as it may deem advisable.

In compliance with the fourth section of the act authorizing their appointment, the commission submitted their report to Congress on the 4th of December, 1882, accompanied with a proposed schedule of duties which they recommended to the consideration of Congress as the basis of a new tariff bill.

As showing the motives which governed the commission in making their investigations on this all-important subject—more seriously affecting the revenues, for at least several years to come, than, perhaps, any other which is likely to come before the present Congress—the following extracts from their report are of more than ordinary interest:

The practical question presented to the commission is that of reconciling the interests of revenue, including the considerations of its sufficient maintenance or possible reduction, with justice to the interests of the nation involved in the preservation of its industries and the security of its labor. The legislation to be recommended is for the present, and not for posterity, which must meet its own emergencies, and the determination of this question involves considerations of expediency, not the least of which is, that the measures recommended be such as shall be acceptable to the country and its representatives in Congress. It must accept the facts that discrimination in the imposition of import duties, a discrimination for the most part positive and avowed, and always, at least, with an incidental reference to the defense of the national industries, has been the policy of the country for generations; that in consequence of this policy thousands of millions of dollars have been invested in special pursuits; that the whole business of the country has been adjusted to the conditions of things growing out of this policy, and is inseparably identified with it; and that a subversive or radical change in the present economic system would throw labor out of employment, ruinously depreciate values, and create a general industrial and commercial disaster.

Early in its deliberations the commission became convinced that a substantial reduction of tariff duties is demanded, not by a mere indiscriminate popular clamor, but by the best conservative opinion of the country, including that which has in former times been most strenuous for the preservation of our national industrial defenses. Such a reduction of the existing tariff the commission regards not only as a due recognition of public sentiment and a measure of justice to consumers, but one conducive to the general industrial prosperity, and which, though it may be temporarily inconvenient, will be ultimately beneficial to the special interests affected by such reduction. No rates of defensive duties, except for the establishment of new industries, which more than equalize the conditions of labor and capital with those of foreign competitors, can be justified. Excessive duties, or those above such standard of equalization, are positively injurious to the interest which they are supposed to benefit. They encourage the investment of capital in manufacturing enterprise by rash and unskilled speculators, to be followed by disaster to the adventurers and their employes, and a plethora of commodities which deranges the operations of skilled and prudent enterprise. Numerous examples of such disasters and derangements occurred during and shortly after the excessively protective period of the late war, when tariff duties were enhanced by the rates of foreign exchange and premiums upon gold. Excessive duties generally, or exceptionally high duties in particular cases, discredit our whole national economic system, and furnish plausible arguments for its complete subversion. They serve to increase uncertainty on the part of industrial enterprise, whether it shall enlarge or contract its operations, and take from commerce, as well as production, the sense of stability required for extended undertakings. It would seem that the rates of duties under the existing tariff—fixed, for the most part, during the war, under the evident necessity at that time of stimulating to its utmost extent all domestic production—might be adapted, through reduction, to the present condition of peace, requiring no such extraordinary stimulus. And in the mechanical and manufacturing industries, especially those which have been long established, it would seem that the improvements in machinery and processes made within the last twenty years, and the high scale of productiveness which has become a characteristic of their establishments, would permit our manufacturers to compete with their foreign rivals under a substantial reduction of existing duties.

The report of the commission was referred to the Committee of Ways and Means of the

House of Representatives, and in the present state of public feeling on this subject it is to be presumed that some action relative to a revision of the tariff will be taken by the present Congress.

An effort was made to reduce internal revenue taxation to the amount of \$23,000,000 per annum by the repeal of all laws imposing taxes upon the capital and deposits of national and other banks and bankers, including all stamp-taxes on bank checks, drafts, etc., together with the tax on matches and proprietary medicines, and a small reduction on cigars and cigarettes, the amount of such reduction being based upon a report from the Committee of Ways and Means of the House of Representatives. This measure, however, failed to become a law.

In his annual report to Congress for 1882, the Comptroller of the Currency reported that the number of national banks organized during the year ended November 1, 1882, was 171, with an aggregate authorized capital of \$15,767,300. Circulating notes were issued to these associations amounting to \$6,500,680. This is the largest number of banks organized in any year since 1872. Nineteen banks, with an aggregate capital of \$1,855,000, and circulation of \$1,440,800, voluntarily discontinued business during the year.

The resources and liabilities of national banks at the close of business on the 30th day of December, 1882, are stated as follows:

RESOURCES.	
Loans and discounts.....	\$1,225,889,580 22
Overdrafts.....	4,566,688 75
United States bonds to secure circulation.....	357,047,650 00
United States bonds to secure deposits.....	16,344,000 00
United States bonds on hand.....	15,492,150 00
Other stocks, bonds, and mortgages.....	66,998,620 36
Due from approved reserve agents.....	122,066,106 75
Due from other national banks.....	76,073,227 76
Due from State banks and bankers.....	18,405,748 49
Real estate, furniture, and fixtures.....	46,998,408 41
Current expenses and taxes paid.....	5,130,505 33
Premiums paid.....	16,281,815 67
Checks and other cash items.....	155,951,194 81
Exchanges for Clearing-House.....	25,344,775 00
Bills of other national banks.....	401,814 70
Fractional currency.....	
Specie, viz.:	
Gold coin.....	\$47,091,088 27
Gold Treasury certificates.....	22,651,770 00
Gold Clearing-House certificates.....	23,235,000 00
Silver coin.....	6,984,896 18
Silver Treasury certificates.....	1,464,460 00
Legal-tender notes.....	106,427,159 40
United States certificates of deposit for legal-tender notes.....	63,478,421 00
Five per cent redemption fund.....	8,475,000 00
Due from United States Treasurer.....	15,773,491 15
	2,150,578 27
<b>Total.....</b>	<b>\$2,360,798,467 09</b>
LIABILITIES.	
Capital stock paid in.....	\$484,888,402 00
Surplus fund.....	125,930,969 81
Other undivided profits.....	55,843,816 94
National-bank notes issued.....	\$319,788,180
Amount on hand.....	4,507,255
Amount outstanding.....	315,280,925 00
State-bank notes outstanding.....	207,273 00
Dividends unpaid.....	6,805,057 52
Individual deposits.....	1,066,901,719 85
United States deposits.....	9,622,303 56
Deposits of United States disbursing officers.....	3,756,262 20



Brought forward.....	\$2,078,711,819 68
Due to other national banks.....	194,491,260 60
Due to State banks and bankers.....	77,081,165 82
Notes and bills rediscounted.....	6,708,164 45
Bills payable.....	8,856,056 54
Total.....	\$2,360,793,467 09

Soon after the beginning of the first session of the Forty-seventh Congress, a bill was introduced, providing for the extension of the corporate existence of national banks, embodying the recommendations of the Comptroller of the Currency. It was subsequently reported to the House by the Committee on Banking and Currency, with several important amendments, and after a lengthy discussion passed May 30, 1882. The bill was amended in the Senate in many particulars, and passed that body June 22d, by a vote of 34 to 14, and was subsequently passed in the House July 10th. Upon the report of the conference committee the vote was yeas 110, nays 79, not voting 101, and the bill was approved by the President July 12, 1882.

The first three sections exhibit the method of procedure by which national banks whose periods of succession are about to expire can extend their charters. In brief, any such bank can, within two years previous to the date at which its corporate existence would otherwise terminate, by the vote of shareholders owning not less than two thirds of its capital stock, extend its corporate existence for twenty years from the date of the expiration of its original period of succession, and its legal status as a corporation is the same as if at the time of its original organization it had had a chartered period of forty years instead of twenty years.

Section 4 makes this view clear, enacting that the association shall preserve its identity, and be the same after extension as before.

The proviso in this section changes the law before in force, as to the jurisdiction of courts in suits by or against national banking associations. Under the old law national banks had both in suits by and against them certain rights granted by statute which placed them upon a different footing from State or private banks and bankers located in the same places; but this proviso places national banks in all suits by or against them upon the same footing as other banks and bankers, except as to suits between them and the United States, or its officers and agents.

Section 5 provides how any stockholder not assenting to the extension of the corporate existence of the bank in which he holds stock, may withdraw from such bank and secure the value of his stock. It also contains a further proviso modifying previously existing law as to the organization of new associations. Prior to the passage of this act, the stockholders of a national bank which had been placed in voluntary liquidation, could under a decision of the Attorney-General organize a new bank, taking the name of the one previously closed.

This can only be done under the present law by the unanimous consent of the stockholders of the bank previously closed; the object of this is to prevent the disregard of the rights of any of the stockholders. The provisions of section 6 relate to the retirement and issue of circulating notes to extended national banks. The design of this section is to cause all notes issued by banks after their extension to be of a new design easily distinguished from notes issued previous to extension, so that the latter may be called in and destroyed.

For the first three years after extension, as the notes of old design are redeemed, notes of the new design are issued to the bank; after three years have elapsed, the bank is required to deposit lawful money to retire such of the notes of old design as have not yet been presented for redemption. It is especially enacted that all gains which may be derived from bank-notes lost and destroyed shall accrue to the Government. Virtually this was the case before, but a specific provision now places the matter beyond controversy. By the same section, the provision that the expense of preparing plates for new circulating notes shall be borne by the banks, which had been the rule before, is made applicable to extending banks.

Section 7 obviates some difficulties which would have been encountered by banks, the corporate existence of which might expire without their stockholders having taken any action for their extension. Under the previous law as interpreted by the United States Supreme Court, there was reason to believe that a national bank after its period of succession had expired, was no longer a corporation, was legally dead, could not sue or be sued.

Under this view, the affairs of a bank in such a condition would have been left in great confusion. Its directors could not act, its property could not be sold, nor could it collect amounts due from its debtors. Its affairs would have been thrown into a condition which could only be arranged by a court of equity, or perhaps by the courts under State statutes. This section provides for a continuation of the franchise of expiring national banking associations which do not extend until such time as their affairs are finally liquidated. Under the old law, any bank, without regard to capital, could be authorized to commence business, or to continue to do business, upon a deposit of \$50,000 in bonds, without regard to the capital stock.

Thus, a bank with a capital of \$50,000 was required to deposit \$50,000 in bonds, and a bank with a capital of \$500,000 was required to do no more.

Under section 8, banks with a capital of \$150,000, or less, can now do business upon a deposit of bonds equal to a quarter of their capital. Thus, a bank of \$50,000 is required to deposit \$12,500 in bonds; of \$150,000 capital, \$37,500 in bonds. Above \$150,000 capital, \$50,000 in bonds is still the minimum required. This section also provides that the amount of



circulating notes shall not in any case exceed 90 per cent of the par value of the bonds.

Previously, also, this was practically the limit, but there was some uncertainty as to the construction of a section of the revised statutes under which it was claimed by some that upon "4 per cents," 90 per cent of the current market value could be issued, although no such issue was ever made to any bank.

The second proviso of section 8 requires banks in voluntary liquidation, when making a final deposit of lawful money to retire their circulation, to be assessed for the cost of redeeming their notes by the Treasurer of the United States. These banks had heretofore escaped paying any cost of redemption of their notes, as had also the bank retiring circulation under the act of June 20, 1874. The cost of redemption in all these cases had been assessed upon the active banks. But now both banks in voluntary liquidation and banks retiring a portion of their circulation are required to bear their share of the general cost of redemption of national-bank notes at the Treasury Department.

Section 9 regulates the deposit of lawful money by national banks for the purpose of retiring their circulation. Previously, circulation might be retired and bonds withdrawn down to the minimum limit, by the deposit of lawful money. This was a great convenience to the banks, by enabling them to take out bonds bearing a high rate of premium, and afterward putting in other bonds, when the market was more favorable for their purchase. It was feared that the banks might, in the free exercise of this right, bring about a severe contraction of the currency; it was, therefore, provided that, except for the withdrawal of called bonds, not more than \$3,000,000 shall be deposited in any calendar month; that no bank retiring circulation by deposit of lawful money can receive new circulation again for a period of six months from the time of making such deposit. If more than \$3,000,000 in lawful money are offered in any calendar month, the deposits are received and acted upon in their order, and the surplus in one month becomes entitled to precedence in the next month.

Section 10 does away with the limit previously imposed, that no bank organized after July 12, 1870, should receive over \$500,000 in circulating notes. It also removes the ambiguity previously existing in the law relative to United States bonds bearing less than 5 per cent interest, and provides that any United States bonds bearing interest may be received from national banks as a basis for the issue of circulating notes. It also provides that the amount issued to any bank shall not exceed 90 per cent of its capital stock, and that the amount issued upon bonds shall not exceed 90 per cent of their current market value if less than par, and in no case shall exceed 90 per cent of their par value.

Under the provisions of the act above re-

ferred to, 187 new national banks were organized during the calendar year ended December 31, 1882, and were authorized to commence business with a capital of \$16,642,300.

Section 12 of the Bank Charter Act, approved July 12, 1882, reads as follows:

That the Secretary of the Treasury is authorized and directed to receive deposits of gold coin with the Treasurer or assistant treasurers of the United States, in sums not less than twenty dollars, and to issue certificates therefor in denominations of not less than twenty dollars each, corresponding with the denominations of United States notes. The coin deposited for or representing the certificates of deposit shall be retained in the Treasury for the payment of the same on demand. Said certificates shall be receivable for customs, taxes, and all public dues, and when so received may be reissued; and such certificates, as also silver certificates, when held by any national banking association, shall be counted as part of its lawful reserve; and no national banking association shall be a member of any clearing-house in which such certificates shall not be receivable in the settlement of clearing-house balances: *Provided*, That the Secretary of the Treasury shall suspend the issue of such gold certificates whenever the amount of gold coin and gold bullion in the Treasury reserved for the redemption of United States notes falls below \$100,000,000; and the provisions of section 5207 of the Revised Statutes shall be applicable to the certificates herein authorized and directed to be issued.

The effect of this proviso is to prevent the holders of legal-tender notes from too rapidly and freely presenting them for redemption in gold coin, in order to deposit the latter and secure gold certificates. The amount of gold certificates issued to December 30, 1882, was \$64,619,840, of which sum \$25,105,030 was held by the Treasurer of the United States.

The excess of exports over imports of gold during the calendar year 1882 was \$25,318,551.

The deposits of bullion and coin, exclusive of redeposits, were, of gold, \$41,921,263.76, and of silver, including purchases, \$85,161,254.49, making a total of \$77,082,518.25; of which \$18,900,132.57 of gold and \$2,172,237.43 of silver were again deposited, making the total amount received and operated upon during the year at all the mints and assay-offices \$60,821,396.33 of gold and \$37,333,491.92 of silver, a total of \$98,154,888.25.

The deposits of domestic production were, gold, \$31,378,248.82, and silver, \$31,400,792.95, a total of \$62,779,041.77; of foreign bullion and coin, gold, \$8,338,619.78, and of silver, \$2,788,039.84; of United States coin, gold, \$402,148.91, of silver, \$587,529.43, a total of \$996,678.34; and of jewelry, plate, etc., gold, \$1,795,246.25, silver, \$384,892.27.

COINAGE OF CALENDAR YEAR 1882.—The total number of pieces struck during the year, and their value, were as follow: Pieces, 88,805,831; of which 7,215,831 were gold; 31,507,000 silver, and 50,083,000, one, three, and five cent pieces; valued at \$94,820,120.

The following table, prepared by the Bureau of Statistics, presents in the order of magnitude the value of merchandise imported into the United States by articles, during the fiscal years 1881 and 1882:



ARTICLES.	1882.		1881.	
	Values.	Per cent of total.	Values.	Per cent of total imports.
Sugar and molasses:				
Sugar.....	\$90,072,043	.....	\$86,281,880	.....
Molasses, melada, sirup of sugar-cane, etc.....	10,896,974	.....	7,122,956	.....
Total.....	\$100,469,022	13.86	\$93,404,288	14.58
Silk, and manufactures of:				
Silk, raw.....	\$12,890,392	.....	\$10,858,264	.....
Manufactures of.....	38,985,667	.....	32,056,701	.....
Total.....	\$51,875,959	7.16	\$42,944,965	6.68
Iron and steel, and manufactures of:				
Pig-iron.....	\$9,213,556	.....	\$8,766,461	.....
Castings.....	91,588	.....	11,788	.....
Bar-iron.....	3,159,499	.....	2,507,658	.....
Boiler-iron.....	17,768	.....	4,097	.....
Band, hoop, and scroll iron.....	59,640	.....	384,744	.....
Railroad bars or rails, of iron.....	2,292,994	.....	3,824,720	.....
Sheet-iron.....	786,794	.....	610,404	.....
Old and scrap iron.....	3,364,925	.....	6,381,608	.....
Hardware.....	73,938	.....	77,869	.....
Anchor, cables, and chains, of all kinds.....	159,514	.....	99,800	.....
Machinery.....	2,027,840	.....	1,668,305	.....
Fire-arms.....	1,498,910	.....	1,166,360	.....
Steel ingots, bars, sheets, and wire.....	18,341,052	.....	6,218,453	.....
Railroad-bars or rails of steel.....	7,147,949	.....	6,507,048	.....
Cutlery.....	1,958,973	.....	1,861,676	.....
Files.....	175,482	.....	147,483	.....
Saws and tools.....	29,892	.....	14,475	.....
Other manufactures of iron and steel, not elsewhere specified.....	6,026,884	.....	6,222,903	.....
Total iron and steel, and manufactures of.....	\$51,877,683	7.09	\$46,475,747	7.28
Wool, and manufactures of:				
Wool, raw.....	\$11,096,050	.....	\$9,708,968	.....
Manufactures of.....	37,861,520	.....	31,156,426	.....
Total.....	\$48,457,570	6.69	\$40,860,394	6.36
Coffee.....	\$46,041,609	6.85	\$56,784,891	8.84
Chemicals, drugs, dyes, and medicines.....	40,755,510	5.62	86,580,473	5.69
Cotton, and manufactures of:				
Cotton, raw.....	\$789,844	.....	\$757,808	.....
Manufactures of.....	34,351,292	.....	31,219,329	.....
Total.....	\$35,141,136	4.85	\$31,976,687	4.97
Hides and skins, other than furs.....	\$27,841,126	3.84	\$27,477,019	4.27
Tin, and manufactures of.....	21,641,173	2.99	18,191,960	2.83
Tea.....	19,392,102	2.68	21,004,813	3.27
Breadstuffs and other farinaceous food.....	19,295,094	2.66	10,668,675	1.66
Flax, and manufactures of:				
Flax, raw.....	\$1,502,645	.....	\$1,462,289	.....
Manufactures of.....	17,720,548	.....	16,169,176	.....
Total.....	\$19,223,193	2.65	\$17,621,465	2.74
Fruits of all kinds, including nuts.....	\$18,518,606	2.56	\$12,865,529	1.92
India-rubber and gutta-percha, and manufactures of.....	14,586,927	2.01	11,242,152	1.75
Wood, and manufactures of.....	14,532,604	2.01	11,651,801	1.81
Leather, and manufactures of.....	12,145,761	1.68	10,656,342	1.65
Jute and other grasses, and manufactures of:				
Raw.....	\$4,710,192	.....	\$4,026,029	.....
Manufactures of.....	5,662,190	.....	4,958,408	.....
Total.....	\$10,372,382	1.48	\$8,984,437	1.40
Fancy goods, perfumery, and cosmetics.....	\$10,212,101	1.41	\$8,208,927	1.28
Wines, spirits, and cordials.....	9,849,533	1.36	8,742,201	1.36
Tobacco, and manufactures of.....	9,347,762	1.29	6,271,773	.98
Precious stones.....	8,444,525	1.17	8,382,511	1.30
Provisions, including eggs and fish.....	8,081,235	1.11	6,220,553	.97
Furs, dressed and undressed.....	8,080,970	1.11	7,001,649	1.09
Earthen, stone, and china ware.....	6,979,659	.96	6,579,989	1.02
Glass and glassware.....	6,634,371	.92	5,578,025	.91
Hemp, and manufactures of:				
Raw.....	\$6,110,152	.....	\$4,047,472	.....
Manufactures of.....	182,158	.....	197,316	.....
Total.....	\$6,292,310	.87	\$4,244,788	.66
Paper materials.....	\$6,014,183	.83	\$5,245,691	.82
Articles, the produce or manufacture of the United States, brought back.....	5,706,893	.80	4,957,482	.77
Animals, living.....	4,812,989	.66	3,972,885	.62
Potatoes.....	4,660,120	.64	874,228	.14
Buttons of all kinds, and button materials.....	3,940,860	.54	3,128,989	.49
Books, pamphlets, engravings, and other publications.....	3,578,924	.49	2,953,269	.46
Straw and palm-leaf, and manufactures of.....	3,449,041	.48	4,864,498	.63
Oils of all kinds.....	3,042,996	.42	2,558,722	.40
Paintings, chromo-lithographs, photographs, and statuary.....	2,086,822	.42	2,546,616	.40
Metals, and manufactures of, not elsewhere specified.....	3,026,531	.42	1,687,944	.26
Spices of all kinds.....	2,603,231	.36	1,700,267	.26
Watches and watch materials.....	2,554,420	.36	2,091,099	.33
Household and personal effects, old and in use, of persons arriving from foreign countries.....	2,429,028	.34	2,386,216	.37

ARTICLES.	1882.		1881.	
	Values.	Per cent of total.	Values.	Per cent of total imports.
Seeds.....	\$2,346,392	'82	\$1,934,929	'81
Coal, bituminous.....	2,189,298	'80	2,008,974	'81
Paper, and manufactures of, not elsewhere specified.....	2,084,289	'29	1,841,840	'29
Hair of all kinds, and manufactures of.....	1,902,508	'26	1,538,400	'24
Dye-woods in sticks.....	1,741,896	'24	1,676,147	'26
Salt.....	1,673,515	'23	2,090,578	'32
Musical instruments.....	1,580,144	'22	1,474,771	'23
Cocoa, crude and manufactured, not including chocolate.....	1,528,993	'21	1,082,276	'17
Clothing (except of silk and hosiery, etc., of cotton and wool).....	1,365,405	'19	1,813,881	'28
Paints of all kinds.....	1,218,112	'17	997,413	'15
Cork, bark and wood, unmanufactured.....	1,124,216	'15	788,103	'12
Bristles.....	1,082,355	'14	911,519	'14
Beer, ale, porter, and other malt liquors.....	970,326	'13	758,169	'12
Marble and stone, and manufactures of.....	930,071	'13	927,752	'14
Guano, except from bonded islands.....	856,622	'12	421,188	'07
Jewelry, and other manufactures of gold and silver.....	712,781	'10	870,584	'06
Brass, and manufactures of.....	682,886	'09	460,178	'07
Copper, and manufactures of.....	564,128	'08	639,315	'10
Barks, used for tanning.....	490,888	'07	501,292	'08
Salt-peter.....	459,954	'06	885,745	'06
Boiling-cloths.....	359,584	'05	829,289	'05
All other articles.....	24,864,655	8-36	20,888,565	8-26
Total.....	\$724,632,574	100-00	\$642,664,628	100-00

The following table will show the value of imports and exports of merchandise with each of the principal foreign countries and their dependencies, for the calendar year 1882:

COUNTRIES.	Exports.	Imports.
United Kingdom (England, Scotland, and Ireland).....	\$399,632,056	\$199,878,998
France.....	54,430,794	97,655,250
Germany.....	56,845,340	58,486,825
WEST INDIES.		
Cuba and Porto Rico.....	17,439,675	62,330,748
British West Indies.....	8,102,346	7,378,943
Haiti and San Domingo.....	3,972,731	4,419,551
French West Indies.....	1,791,469	2,804,087
Dutch West Indies.....	619,641	1,137,001
Danish West Indies.....	727,270	670,794
Total.....	\$32,658,182	\$98,741,124
British North American provinces.....	\$46,051,184	\$49,440,602
Brazil.....	9,067,632	49,297,200
Belgium.....	26,309,302	23,940,144
China, including Hong-Kong.....	8,774,422	19,495,447
Netherlands.....	16,649,095	10,216,552
EAST INDIES.		
British East Indies.....	2,996,086	17,959,029
Dutch East Indies.....	2,243,814	3,897,801
French East Indies.....	21,000	.....
Total.....	\$5,260,400	\$21,856,830
Italy.....	\$11,097,692	\$12,657,555
Mexico.....	16,271,766	7,977,854
Russia.....	12,355,349	2,462,687
Spain.....	14,158,387	7,188,712
Japan.....	8,291,464	16,194,180
United States of Colombia.....	6,597,809	5,612,083
Venezuela.....	2,218,807	6,390,363
Spanish possessions, except Cuba and Porto Rico.....	858,236	10,982,744
British possessions in Australasia.....	10,282,349	4,497,721
Hawaiian Islands.....	3,116,986	8,143,173
Argentine Republic.....	2,931,400	5,776,667
Denmark.....	3,804,819	441,762
Uruguay.....	1,577,814	5,102,421
Central American states and British Honduras.....	2,467,525	5,707,522
Portugal.....	4,654,811	1,262,812
GULANAS.		
British Guiana.....	1,806,256	4,280,908
Dutch Guiana.....	879,138	493,321
French Guiana.....	102,702	24,393
Total.....	\$2,878,091	\$4,757,622
Sweden and Norway.....	\$1,792,561	\$1,979,144
British possessions in Africa and adjacent islands.....	2,925,999	2,216,547
Austria.....	1,586,663	2,697,422
Turkey.....	1,186,611	2,177,214
Chili.....	2,818,924	975,583
Gibraltar.....	908,267	4,969
All other countries and ports, not elsewhere specified.....	4,281,339	9,848,488
Total.....	\$767,981,946	\$752,843,507



## FISHERIES OF THE UNITED STATES

FOR THE YEAR 1880.

I. NEW ENGLAND STATES.—1. *Maine*. In the extent and value of her sea-fisheries, Maine ranks second only to Massachusetts:

Persons employed: sea, 11,071; river, 1,591.....	12,662
Vessels employed.....	606
Tonnage of same.....	17,638
Fishing-boats.....	5,920
Capital dependent on fishery industries: sea, \$3,375,994; river, \$73,808.....	\$3,454,302
Pounds of products as they come from the water: sea, 202,043,449; river, 4,780,244.....	206,778,638
Value of same, sea.....	\$1,790,849
Pounds of products, as prepared for market: sea, 116,122,043; river, 3,794,180.....	119,916,228
Enhancement of value by preparation.....	\$1,823,329
Value of river-products as sold.....	\$125,046
Value of sea-products (marketable).....	\$3,614,178
Total value of products.....	\$3,739,224

In addition to the 12,662 persons actually engaged in the fisheries, there is a large number employed in transporting products to larger markets, in building and repairing vessels, in making boxes, barrels, cans for packing fish, etc. Probably some 2,500 are thus employed, making a total of over 15,000. Estimating that the larger part of these have families, it is probable that about 48,000 (equal to  $7\frac{1}{2}$  per cent of the population of the State) derive their main support from the fishery industries. It should also be noted that the cost of the products to the consumer is largely increased in various ways (by transportation charges, etc.), so that, adding some \$3,000,000 to the sum named above, this cost is equal to nearly \$6,750,000.

2. *New Hampshire*:

Persons employed: in vessels and boats, 376; others, 38.....	414
Capital invested (vessels, boats, nets, wharves, etc.).....	\$209,465
Value of products (10,400,294 pounds fish).....	\$175,684

3. *Massachusetts*:

Persons employed in vessels and boats, as curers and packers, etc.....	20,117
Number of fishermen: vessel, 12,367; boat, 4,323. Vessels employed.....	17,165
Boats employed.....	1,007
Tonnage of boats and vessels.....	6,749
Capital invested (vessels, boats, nets, buildings, etc.).....	\$14,394,450
Pounds of fish as caught.....	841,985,982
Pounds of lobsters, clams, oysters, etc.....	1,275,000
Pounds as prepared for market.....	221,666,174
Value in fresh condition.....	\$3,494,910
Enhanced by curing.....	\$1,557,646
Total value of fish as sold.....	\$5,052,900
Total value of lobsters, clams, oysters, etc.....	\$997,513
Total value of whale-fishery.....	\$2,059,337
Total value of products placed on market.....	\$3,141,750
Add 25 per cent as expenses, and profits of deal- ers, making wholesale value.....	\$10,117,187
Pounds of ice used for fish preservation.....	75,000,000
Pounds of salt used for curing.....	70,000,000

At least 5,000 additional persons are employed in building vessels, making nets, boxes, etc. Including families of fishermen and others dependent on fisheries, it is estimated that 100,000 people rely upon this industry for support. There are eleven customs districts in Massachusetts. Of these, Gloucester ranks first, producing, in fact, more than half the entire yield of the State; New Bedford, Barnstable, and Boston, rank next.

4. *Rhode Island*:

Persons employed: vessels, 536; boats, 1,066; curers, packers, etc., 708.....	2,301
Capital invested (vessels, boats, nets, etc.).....	\$296,678
Value of products (\$8,049,973 pounds fish).....	\$580,915

5. *Connecticut*:

Persons employed: vessels, 1,544; boats, 1,041; curers, packers, etc., 546.....	8,191
Capital invested (vessels, boats, nets, etc.).....	\$1,421,020
Value of products (\$8,509,367 pounds fish, includ- ing whale-oil, whalebone, menhaden-oil, etc.)..	\$1,456,866

II. MIDDLE STATES.—1. *New York*: The fisheries of New York and the other Middle States are arranged under three heads, as follows:

(a.) <i>Sea-Fisheries</i> :	
Persons employed: fishermen, 3,056; shoresmen, 522; factory-hands, 851.....	8,929
Vessels, 213; boats, 1,725; total.....	1,938
Capital invested (vessels, boats, traps, nets, facto- ries, etc.).....	\$1,706,840
Pounds of sea-products taken (including lobsters, crabs, clams).....	318,482,478
Value to fishermen.....	\$2,483,695
(b.) <i>River and Lake Fisheries</i> :	
Persons employed.....	1,688
Vessels, 12; boats, 502.....	514
Capital invested (vessels, boats, nets, etc.).....	\$157,285
Pounds of products (shad, sturgeon, lake-fish, etc.)	7,737,600
Value.....	\$919,820
(c.) <i>Oyster-Fisheries</i> :	
Persons employed: fishermen, 1,958; shoresmen, 766.....	2,724
Vessels, 426; boats, 1,714.....	2,140
Capital invested (vessels, boats, shore property)	\$1,013,060
Bushels of oysters.....	1,043,300
Enhanced value by preparation for market.....	\$583,750
Total value as sold.....	\$1,577,050

2. *New Jersey*:

(a.) <i>Sea-Fisheries</i> :	
Persons employed: fishermen, 4,254; shoresmen, 85; factory-hands, 742.....	4,481
Vessels, 89; boats, 3,265—total.....	3,304
Capital invested (vessels, boats, traps, nets, etc.)	\$456,684
Pounds of sea-products (including lobsters, crabs, clams).....	48,574,456
Value to fishermen.....	\$1,004,529
(b.) <i>River and Lake Fisheries</i> :	
Persons employed.....	342
Vessels, 6; boats, 100.....	106
Capital invested (vessels, boats, nets, etc.).....	\$80,168
Pounds of products (alewives, shad, mixed river- fish, etc.).....	2,762,000
Value.....	\$91,435
(c.) <i>Oyster-Fisheries</i> :	
Persons employed: fishermen, 2,605; shoresmen, 372.....	2,917
Vessels, 375; boats, 1,400—total.....	1,975
Capital invested (vessels, boats, nets, etc.).....	\$1,037,000
Bushels of oysters.....	1,975,000
Enhanced value by preparation for market.....	\$110,625
Total value as sold.....	\$2,080,625

3. *Pennsylvania*:

(a.) <i>Sea-Fisheries</i> :	
Persons employed.....	101
Vessels and boats.....	16
Capital invested.....	\$23,440
Pounds of sea-products sold fresh.....	600,000
Value.....	\$36,000
(b.) <i>River and Lake Fisheries</i> :	
Persons employed: fishermen, 414; shoresmen, 37. Vessels, 3; boats, 148.....	451
Capital invested.....	151
Pounds products (shad, lake-fish, etc.).....	\$96,370
Value.....	2,393,000
(c.) <i>Oysters</i> :	
Bushels rehandled.....	\$96,550
Value as enhanced.....	250,000
	\$187,500

4. *Delaware*:

(a.) <i>Sea-Fisheries</i> :	
Persons employed: fishermen, 912; shoresmen, 24.....	936
Boats.....	539
Capital invested.....	\$39,906

Pounds of sea-products (including lobsters, crabs, etc.)	5,522,953
Value	\$162,354
(b.) River and Lake Fisheries:	
Persons employed: fishermen, 450; shoresmen, 63	513
Vessels, 3; boats, 150—total	153
Capital invested	\$100,825
Pounds of products (including alewives, shad, sturgeon, etc.)	4,295,250
Value	\$147,116
(c.) Oyster-Fisheries:	
Persons employed: fishermen, 820; shoresmen, 30; factory-hands, 215	1,065
Vessels, 65; boats, 300—total	365
Capital invested	\$145,500
Bushels of oysters	300,000
Bushels of oysters rehandled	834,500
Enhanced value	\$187,500
Total value as sold	\$687,725

1. New York ranks fourth in the list of fish-producing States. Her menhaden-fisheries are more extensive than those of any other State. The value of her oyster-fisheries is greater than that of any other of the States, except Maryland, Virginia, and New Jersey. More soft-clams are here obtained than anywhere else; and in shad-fisheries she ranks third on the list.

2. New Jersey is sixth on the list. Her oyster-products are exceeded only by Maryland and Virginia. Crab-fisheries are more extensive in New Jersey than in any other State. In menhaden-fisheries she stands fifth, but her river-fisheries are unimportant.

3. Pennsylvania is chiefly interested in the oyster industry. Sea-fishing is confined to sea-bass, shad, sturgeon, etc., taken in small quantities.

4. Delaware. The oyster industry is the principal fishery business of this State, over two thirds of the money realized by fishermen being derived from the capture and sale of this species. Other fishery interests of the State are limited. There is some net-fishing for shad, sturgeon, etc., in the Delaware and its tributaries.

5. Further, from the statistics of the more important species taken by fishermen of the Middle States, it appears that 318,588,700 pounds, or over three fourths of the entire catch, are menhaden. The next species in importance for bulk is the oyster, and, allowing seven pounds of meat for each bushel of shell-oysters, there results 23,238,100 pounds of oyster-meats. Of other species are taken (in quantities exceeding 5,000,000 pounds), squeteague, 11,063,500 pounds; blue-fish, 6,710,800 pounds; hard-clams (allowing eight pounds of meat to the bushel), 5,933,664 pounds; codfish, 5,247,000 pounds; shad, 5,207,200 pounds. Fourteen other species are produced in quantities ranging from 1,000,000 to 5,000,000 pounds each.

#### GENERAL SUMMARY OF FISHING INTERESTS OF THE MIDDLE STATES.

Persons employed	16,017
Fishing-vessels	1,211
Tonnage of vessels	23,576
Fishing-boats	8,501
Capital dependent on fishery industries	\$4,599,828
Pounds of fish sold fresh for food	55,277,776
Pounds of fish salted for food	2,494,000

Pounds of other products for food	86,758,836
Pounds of miscellaneous products for fertilizers and other purposes	819,005,700
Value of products in marketable condition	\$8,874,899

It is estimated that not less than 62,000 persons in the Middle States are largely dependent on the fisheries for a livelihood. Thousands of others have more or less interest in this industry. The \$8,874,899 represent the actual value to the fishermen, deducting all expenses. There is, of course, a considerable increase from the producer to the consumer, which may be roughly estimated at \$6,000,000. Hence the products of the fisheries of the Middle States, as they finally enter into consumption, are worth nearly \$15,000,000.

#### III. SOUTHERN ATLANTIC STATES.—1. Maryland:

(a.) Sea-Fisheries:	
Persons employed: fishermen, 275; shoresmen, 15; factory-hands, 15	305
Vessels, 6; boats, 200—total	206
Capital invested (vessels, boats, nets, factories, etc.)	\$43,825
Pounds of products (including terrapin, crabs, etc.)	6,081,667
Value to fishermen	\$88,451

(b.) River-Fisheries:	
Persons employed: fishermen, 2,735; shoresmen, 451	3,186
Vessels, 12; boats, 928	940
Capital invested (vessels, boats, nets, shore-property, etc.)	\$294,518
Pounds of products (alewives, shad, mixed fish, etc.)	15,480,908
Value to fishermen	\$402,783

(c.) Oyster Industry:	
Persons employed: fishermen, 13,748; shoresmen, 790; factory-hands, 8564	23,402
Vessels, 1,450; boats, 1,825—total	3,275
Capital invested (vessels, boats, shore-property, etc.)	\$6,084,850
Bushels of oysters	10,600,000
Bushels of oysters rehandled	7,638,492
Enhanced value by preparation for market	\$2,080,476
Total value as sold	\$4,730,476

#### 2. Virginia:

(a.) Sea-Fisheries:	
Persons employed: fishermen, 1,830; shoresmen, 20; factory-hands, 607	2,457
Vessels, 119; boats, 1,439—total	1,558
Capital invested (vessels, boats, factories, etc.)	\$407,435
Pounds of products (including terrapin, crabs, etc.)	98,261,805
Value to fishermen	\$683,240

(b.) River-Fisheries:	
Persons employed: fishermen, 2,534; shoresmen, 107	2,641
Vessels, 20; boats, 1,258—total	1,278
Capital invested (vessels, boats, nets, shore-property, etc.)	\$264,762
Pounds of products (alewives, shad, mixed fish, etc.)	12,752,064
Value to fishermen	\$272,823

(c.) Oyster Industry:	
Persons employed: fishermen, 14,236; shoresmen, 501; factory-hands, 1,578	16,315
Vessels, 1,317; boats, 4,481—total	5,798
Capital invested (vessels, boats, shore-property, etc.)	\$1,831,100
Bushels of oysters	6,837,320
Bushels of oysters rehandled	1,622,130
Enhanced value by preparation for market	\$200,740
Total value as sold	\$2,218,976

#### 3. North Carolina:

(a.) Sea-Fisheries:	
Persons employed: fishermen, 1,707; shoresmen, 118; factory-hands, 25	1,850
Vessels, 4; boats, 1,110—total	1,114
Capital invested (vessels, boats, nets, factories, etc.)	\$172,800
Pounds of products (including terrapin, turtle, crabs, etc.)	10,167,300
Value to fishermen	\$220,745



*(b.) River-Fisheries:*

Persons employed: fishermen, 2,822; shoresmen, 832.....	8,204
Vessels, 13; boats, 1,204—total.....	1,217
Capital invested (vessels, nets, shore-property, etc.).....	\$299,061
Pounds of products (alewives, shad, mixed fish, etc.).....	29,892,188
Value to fishermen.....	\$564,950

*(c.) Oyster Industry:*

Persons employed: fishermen, 1,000; shoresmen, 20.....	1,020
Vessels, 90; boats, 800.....	890
Capital invested (vessels, boats, shore-property, etc.).....	\$63,500
Busbels of oysters.....	170,000
Value as sold.....	\$60,000

*4. South Carolina:**(a.) Sea-Fisheries:*

Persons employed: fishermen, 629; shoresmen, 24.....	653
Vessels, 10; boats, 237—total.....	247
Capital invested (vessels, boats, nets, factories, etc.).....	\$42,175
Pounds of products (including terrapin, crabs, etc.).....	4,749,400
Value to fishermen.....	\$153,125

*(b.) River-Fisheries:*

Persons employed: fishermen, 287; shoresmen, 12.....	299
Vessels, 2; boats, 217—total.....	219
Capital invested (boats, nets, etc.).....	\$14,490
Pounds of products (alewives, shad, etc.).....	1,043,850
Value to fishermen.....	\$89,857

*(c.) Oyster Industry:*

Persons employed: fishermen, 175; shoresmen, 10.....	185
Vessels, 10; boats, 100—total.....	110
Capital invested (boats, gear, etc.).....	\$12,250
Busbels of oysters.....	50,000
Value as sold.....	\$20,000

*5. Georgia:**(a.) Sea-Fisheries:*

Persons employed: fishermen, 121; shoresmen, 40.....	161
Boats.....	66
Capital invested (boats, nets, factories, etc.).....	\$43,625
Pounds of products (including terrapin, crabs, etc.).....	492,005
Value to fishermen.....	\$19,220

*(b.) River-Fisheries:*

Persons employed: fishermen, 488; shoresmen, 24.....	511
Vessels, 1; boats, 225.....	226
Capital invested (boats, nets, etc.).....	\$22,545
Pounds of products (including shad, mixed fish, etc.).....	1,290,500
Value to fishermen.....	\$65,768

*(c.) Oyster Industry:*

Persons employed: fishermen, 800; shoresmen, 50.....	850
Boats.....	100
Capital invested (boats, gear, etc.).....	\$18,500
Busbels of oysters.....	70,000
Value as sold.....	\$35,000

*6. East Florida:**(a.) Sea-Fisheries:*

Persons employed: fishermen, 223; shoresmen, 15.....	238
Boats.....	245
Capital invested (boats, nets, etc.).....	\$27,794
Pounds of products (including terrapin, turtle, shrimps, etc.).....	1,479,300
Value to fishermen.....	\$41,072

*(b.) River-Fisheries:*

Persons employed: fishermen, 170; shoresmen, 12.....	182
Boats.....	83
Capital invested (boats, nets, etc.).....	\$15,950
Pounds of products (including shad, mixed fish, etc.).....	667,450
Value to fishermen.....	\$82,336

*(c.) Oyster Industry:*

Persons employed: fishermen, 50; shoresmen, 6.....	56
Boats.....	60
Capital invested (boats, gear, etc.).....	\$6,100
Busbels of oysters.....	20,000
Value as sold.....	\$5,000

1. Maryland's place in sea-fishery is unimportant, but in oyster and river fisheries she ranks next to Massachusetts in the value of products, and first on the list in the number of persons employed. The oyster interests are more important than in any other State. More shad, too, are taken than in any other State, and she ranks second only to North Carolina in the extent and value of her alewife (called herring) fisheries.

2. Virginia ranks seventh on the list of fish-producing States. In the oyster-fishery she ranks second to Maryland. Her menhaden-fishery is much increased; and her river-fisheries are important, yielding shad and alewives in large abundance.

3. North Carolina ranks first in alewife-(called herring-) fishery, the catch being 15,520,000 pounds, worth \$142,784. The shad taken nearly equal those of Maryland, but bring higher price, owing to their early appearance in Northern markets. In the mullet-fishery North Carolina is second only to Florida, the catch amounting to 3,368,000 pounds, worth \$80,500.

4. South Carolina is twentieth in the list of fish-producing States. Her shrimp-fisheries are more important than those of any other State. In 1880 her fishermen secured 18,000 bushels, valued at \$37,500. Alewives, shad, and sturgeon are the chief fishes caught.

5. Georgia's sea-fisheries are as yet undeveloped, and rank lowest on the list. Her river-fisheries are better, shad and sturgeon being the principal fish caught.

6. Eastern Florida, on the Atlantic coast—fishing chiefly by hook-and-line and cast-nets. Green-turtle were taken on Indian River amounting to 88,250 pounds, valued at \$6,000. Shad-fisheries are recent but extensive. The yield for 1880 was 251,700 pounds, valued at \$20,136.

7. Further, it appears that two fifths of the product of fishery in the South Atlantic States are oyster-meats. Menhaden are the largest catch, being over 92,000,000 pounds. Next are alewives (called herring), about 32,000,000 pounds, and shad, nearly 11,000,000 pounds. Mullet, crabs, blue-fish, perch, and striped-bass are taken in quantities exceeding 2,000,000 pounds; and nine other species range between 1,000,000 and 2,000,000 pounds.

## GENERAL SUMMARY OF FISHING INTERESTS OF THE SOUTHERN ATLANTIC STATES.

Persons employed.....	52,418
Fishing-vessels.....	3,014
Tonnage of same.....	60,886
Fishing-boats.....	13,381
Capital dependent on fishery industries.....	\$8,951,722
Pounds of fish sold fresh for food.....	42,571,340
Pounds of fish salted for food.....	20,579,500
Pounds of products, other than fish, for food.....	129,719,527
Pounds of miscellaneous products for fertilizers and other purposes.....	94,663,800
Value of products to the fishermen.....	\$9,602,737

It is estimated that some 30,000 families are represented in the fishing interests in this district, and that the total number of people de-

pendent on the fisheries scarcely falls below 200,000. Fully five eighths of these are Americans. Excepting a few foreigners, chiefly of Spanish descent, the remainder are mostly negroes. The \$9,602,737 represent the sum realized by the fishermen as the result of their labor, and not the market value of the catch. Owing to the cost of transportation, icing, packing, etc., the values of many of the products are greatly increased before they finally reach the consumer. Hence the market value of the products is not less than \$16,600,000.

**FLORIDA. STATE GOVERNMENT.**—The State officers during the year were as follow: Governor, W. D. Bloxham (Democrat); Lieutenant-Governor, L. W. Bethel; Secretary of State, John L. Crawford; Treasurer, Henry A. L'Engle; Comptroller, W. D. Barnes; Attorney-General, George P. Raney; Superintendent of Public Instruction, E. K. Foster; Adjutant-General, J. E. Yonge; Commissioner of Lands and Immigration, Hugh A. Corley. Judiciary: Chief-Justice of Supreme Court, Edwin M. Randall; Associate-Justices, James D. Westcott, Jr., and R. B. Van Valkenburgh.

**INTERNAL IMPROVEMENTS.**—The reclamation of lands in the southern portion of the peninsula, by affording an outlet for the waters of Lake Okeechobee, has been much discussed for many years, but no decisive step was taken in that direction until January, 1881. At that date Colonel I. Coryell appeared before the Board of Trustees of the Internal Improvement Fund, as the representative of Philadelphia capitalists, and negotiated a contract with the board for the drainage and reclamation of the lands lying south of township twenty-four, in consideration of receiving one half of the lands so reclaimed. The last Legislature chartered the "Atlantic and Gulf Coast Canal and Okeechobee Land Company," who have succeeded to all the rights under the contract.

This company immediately had a series of surveys made to test the practicability of the proposed undertaking, and from their surveys, as well as those made by the United States, under the direction of General Gillmore, it was shown that Lake Okeechobee has an elevation of twenty-two feet above the Gulf of Mexico, and that Lake Tahoepekalgia, the head-waters of the Kissimmee River, has an elevation of sixty-five feet above the waters of the Gulf. These facts being ascertained, the company assumed the entire practicability of reclaiming this vast area, amounting to many million acres, by drawing off the waters, and preventing the periodical overflows. The work was commenced by building powerful steam-dredges on the Caloosahatchee River and Tahoepekalgia Lake, the plan of operations being to open a canal from the Caloosahatchee River to Lake Okeechobee, and the cutting of a canal from Lake Tahoepekalgia through to Kissimmee Lake, then straightening the Kissimmee River, and the cutting of one or more canals from Okeechobee to the Atlantic Coast, as well as the construc-

tion of subsidiary canals. The dredge upon the Caloosahatchee entered Lake Okeechobee on the 21st of December.

Up to December 1, 1882, the company report that they had expended \$93,777.40, and had constructed over twelve miles of canal, twenty-two to thirty-five feet wide and five to six feet deep.

The early completion of the first series of canals is already assured, which, in addition to the reclamation of the lands, will afford a great inland system of steamboat navigation from Kissimmee City through the Caloosahatchee to the Gulf of Mexico, a distance of 180 miles.

The feasibility of forming an inland water communication from the mouth of the St. John's River to Biscayne Bay, in the extreme southern portion of the State, a distance of some two hundred and seventy miles, by utilizing the waters of Pablo Creek and North, Matanzas, Halifax, and Indian Rivers, has long been conceded. It took practical shape when Colonel I. Coryell and Hon. John Westcott organized, under the general incorporation act, the "Florida Coast-Line Canal and Transportation Company," with a capital of \$500,000. Active operations were commenced in November, by the construction of a suitable steam-dredge, which was carried from St. Augustine to the south end of Matanzas River, where it commenced operations.

In regard to railroads, the Governor, in his message to the Legislature of 1883, says:

Florida has every cause of congratulation in having more miles of railroad construction in her limits, in the last two years, than in her entire former history. West Florida, that has for so many years been cut off from direct communication with the remaining portion of the State, has now practically rail connection with our system of roads; and Pensacola, the queen of all Gulf ports, as well as the interior western counties, will in a few weeks have direct communication with our Atlantic sea-ports. The rapidity with which the Pensacola and Atlantic road has been built, connected with its superior structure and equipments, speaks well for the company, as well as for the efficient superintendent. The time is not far distant when through trains of freight and passenger travel from the Golden Gate of the Pacific will find their exit by this line through the ports of Jacksonville and Fernandina. The Florida Southern has also completed, and has in operation, one hundred miles of road, and I am informed has made arrangements for a further and greatly increased extension. The road chartered from Live Oak to Rowland's Bluff has been finished to the latter point, and is vigorously pushing forward in the direction of South Florida. The roads from Wacarcross to Jacksonville, and from Fernandina to Jacksonville, have been completed. Jacksonville and St. Augustine will, in a short time, have a new road completed, and thus be furnished with direct rail connection. The road from Waldo has been pushed on to Silver Spring and Ocala, connecting there with the Tropical, which has been built and is in operation as far south as Wildwood, in Sumter County, with a branch graded and cross-tied from Wildwood to Leesburg. The South Florida road has been built from Orlando to Kissimmee City, thus giving the Kissimmee Valley direct communication with the St. John's, The St. John's and Halifax, Palatka and Indian River, Green Cove and Melrose, and the Jacksonville, Tampa, and Key West roads, all have portions graded, and the former some eight miles of iron laid. While



these improvements are unparalleled in the history of the State, yet it is a source of deep regret that neither of the several lines leading to Tampa and farther south have yet reached that desirable section. The Trustees of the Internal Improvement Fund, appreciating the great advantages of that highly favored section, and with an earnest desire to secure to it railroad facilities, reserved lands for five different lines running to Tampa and some farther south, through the counties of Hernando, Polk, Hillsborough, and Manatee. From information received, however, I can but believe that the time is near at hand when these facilities, so long needed, will be secured.

**STATISTICS.**—The total receipts into the State Treasury on account of general revenue (including interest taxes) for the fiscal year ending December 31, 1882, amounted to \$350,569.80, as follows:

State-tax proper, 1882.....	\$14,215 43
“ “ 1881.....	124,045 11
“ “ 1880.....	6,738 79
“ “ 1879.....	201 02
“ “ 1878.....	120 75
“ “ 1877.....	143 74
“ “ 1876.....	24 52
“ “ 1875.....	459 40
“ “ 1874.....	1,446 94
License-tax.....	104,735 62
Auction-tax.....	641 73
Criminal prosecutions (costs).....	311 25
Hire of convicts.....	3,630 00
Commission-tax.....	715 00
Sale of Digest.....	774 00
<b>Total.....</b>	<b>\$258,243 83</b>
General sinking fund and interest-tax, 1881.....	55,969 55
“ “ “ 1880.....	1,247 49
“ “ “ 1879.....	115 09
“ “ “ 1878.....	89 20
“ “ “ 1877.....	51 89
“ “ “ 1876.....	1 50
“ “ “ 1875.....	60
<b>Total.....</b>	<b>\$57,474 82</b>
Special sinking fund and interest-tax, 1881.....	27,954 63
“ “ “ 1880.....	599 10
“ “ “ 1879.....	56 63
“ “ “ 1878.....	22 83
“ “ “ 1877.....	35 32
“ “ “ 1876.....	50
“ “ “ 1875.....	20
<b>Total.....</b>	<b>\$23,669 81</b>
General and special sinking fund and interest-tax, 1882.....	6,182 29
<b>Grand total.....</b>	<b>\$350,569 80</b>

The following statement shows the amount of warrants and coupons paid at the Treasury for the fiscal year ending December 31, 1882:

Salaries, Executive Department.....	\$18,787 00
“ “ Judicial Department.....	83,020 00
Contingent expenses of State.....	2,800 76
Stationery, Executive and Legislative Departments.....	620 88
Expenses of collection of revenue.....	22,566 14
Expenses of Bureau of Immigration.....	7,367 40
Post-mortem examinations.....	250 00
Printing.....	6,198 87
Maintenance of lunatics.....	27,177 92
Jurors and witnesses.....	45,327 98
Contingent expenses of Supreme Court.....	2,243 63
Insurance of Capitol.....	525 00
Watchman at Capitol.....	257 00
Janitor at Capitol.....	275 00
Conveying prisoners to Penitentiary.....	10 50
Railroad-tax litigation.....	137 12
Repairs of Capitol.....	1,191 91
Criminal prosecutions.....	89 21
Expenses of printing Digest.....	2,932 50
Legislative relief acts.....	456 14
Interest on coupon bonds of 1871 and 1873.....	118,128 72
<b>Total.....</b>	<b>\$289,693 68</b>

The estimated appropriations necessary for the fiscal year 1883 are \$315,573, including \$69,000 for expenses of legislative session and \$80,000 for interest on bonds; for 1884, \$243,573. The following is a statement of the bonded debt:

7 per cent bonds of 1871.....	\$350,000 00
6 per cent bonds of 1873.....	925,000 00
8 per cent Convention bonds.....	1,500 00
<b>Total.....</b>	<b>\$1,275,500 00</b>

Of this indebtedness there is:

In sinking funds.....	\$159,500 00
In school fund.....	285,600 00
In Seminary fund.....	87,400 00
In Agricultural-College fund.....	134,200 00
<b>Total.....</b>	<b>\$666,700 00</b>

Leaving in the hands of individuals..... \$609,800 00

In relation to other bonds, the Comptroller makes the following statement:

In addition to the above bonds there appears to be outstanding \$4,000 of bonds issued in 1875, which have never been presented at the Treasury for payment of either principal or interest.

There are also 7 per cent bonds of the State held by the Indian Trust Fund of the United States amounting to \$132,000, but as an offset the State has a claim against the United States for an amount more than sufficient to cover the face of these bonds with interest.

Upon coming into office, I receipted to my predecessor, the Hon. Columbus Drew, for \$75,000 of the 6 per cent bonds authorized to be issued under the act of February 21, 1873, which had not been sold or exchanged, as provided by said act. They numbered from 2,951 to 3,700. These were destroyed on the 17th of February, 1881, by a committee of the Legislature appointed for that purpose.

The table of assessment for 1882 shows that the taxable valuations amounted to \$45,285,977, a large increase since 1880. But more than \$3,000,000 of this was upon railroad property for which exemption is claimed. “It is deemed safe, however,” says the Comptroller, “to base estimates for a revenue upon \$42,000,000 of tax-paying property, and if the income from licenses is not diminished, a rate of four mills on the dollar is thought to be sufficient to raise the revenue required to defray the current expenses of the State government and meet the accruing interest on the bonded debt. This estimate is not intended to include the constitutional tax of one mill for school purposes.”

The question of the liability of the particular railroads claiming immunity from taxation, has been submitted to the courts of the State by suits brought in compliance with a resolution adopted at the last session of the Legislature, with results favorable to the State, but the cases are now pending in the Supreme Court of the United States on appeal.

The State taxes in 1882 were as follow: State tax, \$200,827.28; sinking funds, \$91,531.95; school fund, \$45,332.71—total, \$337,691.94. The county taxes were: County tax proper, \$175,369.82; county school tax, \$135,235.42; county special tax, \$115,963.84—total, \$426,569.08.

The last Legislature (says the Governor in his message) passed an act to provide for the assessment and collection of taxes upon improvements on the public lands, and for the protection of occupying claimants of said lands. The object and intention of the law was to protect actual settlers, and furnish them some guarantee of securing the land upon which they had made improvements. The operation of the law, however, has not been satisfactory, and in some instances has led to results foreign to those for which it was intended. Parties have been compelled to pay taxes upon their improvements on United States lands, and on lands previously granted by the Legislature to railroads, without any prospect of being protected by the State. Other cases of hardship have occurred, and, unless the law can be materially amended, I recommend its repeal.

There has been a large increase in school facilities and in the attendance of pupils. The number of schools in 1877 was 656, with 29,678 pupils; in 1880, 1,131, with 39,315 pupils; for the scholastic year beginning October 1, 1882, 1,326, with 51,945 pupils. The principal of the common-school fund has also increased, rising from \$246,900 in January, 1881, to \$323,535.42 at the close of 1882. It was recently ascertained that nearly 80,000 acres of school lands were due from the United States. Selections amounting to 43,745.<sup>92</sup>/<sub>100</sub> acres have been approved, and the residue, it is expected, will be speedily located. There are 561,728 acres of land belonging to the school fund and 33,820 acres belonging to the seminary fund yet unsold.

The Governor in his message calls the attention of the Legislature to the subject of deaf-mute education in the following language:

I can not forbear in this connection calling your attention to the entire absence of any legislation for the education of that unfortunate class of our population known as deaf-mutes. There are in the State, as shown by the last census, 119; of these 58 are white and 61 colored. There are under the age of twenty-five, and now urgently requiring educational facilities, 78. Of this number 32 are white and 46 colored. I can imagine no class of our citizens who are so entirely dependent upon education, and I sincerely trust that the subject may receive your careful and favorable consideration. Some portion of the common-school fund should be set apart, under the direction of the State Board of Education, for this praiseworthy object.

Under the Agricultural College grant Florida received ninety thousand acres, which were sold for \$81,000. The proceeds of the sale were invested in \$100,000 of Florida bonds. The interest has since been invested, and the fund now has an income of about \$9,000 per annum. As no portion of the fund nor the interest can be applied to building purposes, no institution has been established. The trustees of this fund were to meet in Tallahassee on the 9th of January, 1883, to take into consideration the best means of utilizing the income for educational purposes.

On January 1, 1881, there were 95 inmates in the insane asylum. During the two following years there were admitted 112; discharged, 50; died, 26; escaped, 8; readmitted, 5; in the institution January 1, 1883, 128, of whom

86 were white males, 44 white females, 27 colored males, and 21 colored females.

The East Florida Railway Company had the State convicts in charge during 1881 and 1882. It received the convicts at the several jails, paid all expenses after conviction, and, in addition, paid into the State Treasury over \$6,000 for their services during the two years. The convicts have been let for the years 1883 and 1884 to an individual for the sum of \$9,200, the other conditions being the same as those in the railway lease. The number of convicts December 31, 1880, was 129, which were handed over to the railway company; delivered to it during 1881, 101; discharged, 49; pardoned, 4; escaped, 13; died, 14; sentence commuted, 1; remaining, January 1, 1882, 149; delivered to the railway company during the year, 69; discharged, 55; pardoned, 3; escaped, 5; died, 10; remaining at the close of the year, 135.

Of the population in 1880 (269,493), 186,444 were males, 133,049 females, 259,584 of native and 9,909 of foreign birth; 142,605 white, 126,690 colored, 18 Chinese, and 180 Indians. There were 61,699 males twenty-one years old and over, of whom 34,210 were white (30,351 native and 3,859 foreign) and 27,489 colored. Of persons ten years of age and upward, 70,219, or 88 per cent, were unable to read, and 80,183, or 43.4 per cent, were unable to write, including 19,024 native whites, or 20.7 per cent of that class, and 60,420 colored persons, or 70.7 per cent of that class. Of the native population, 173,481 were born in the State, 32,601 in Georgia, 18,522 in South Carolina, 12,023 in Alabama, 6,297 in North Carolina, 3,329 in Virginia, 2,375 in New York, 862 in Massachusetts, 855 in Pennsylvania, and 833 in Tennessee. There were living in the United States 194,518 natives of Florida. There were produced 54,997 bales of cotton, 3,174,234 bushels of corn, and 468,112 of oats; live-stock on farms, 22,636 horses, 9,606 mules and asses, 16,141 working-oxen, 42,174 milch-cows, 409,055 other cattle, 56,681 sheep, and 287,051 swine. There were 426 manufacturing establishments; capital, \$3,210,680; hands employed, 5,504; value of materials used, \$3,040,119; of products, \$5,546,448. The principal stock-raising counties, with the number of cattle in each, according to the tax-books of 1881, are as follow: Manatee, 53,273; Brevard, 39,632; Monroe, 24,710; Polk, 22,082; Hillsborough, 21,223; Sumter (1880), 16,276; Hernando, 14,882; Volusia, 13,635; total for eight counties, 205,714.

In the case of Emily R. Wilson, executrix, etc., vs. Phæbe Fridenburg, the Supreme Court decided the following points relating to the homestead exemption in this State:

1. Under the Constitution of this State the right of a wife as to the homestead is confined to a power to prevent alienation by her husband, the head of the family, without her consent made jointly with him. But the Constitution does not, however, repeal the statute allowing dower in the estate of the husband, and this right exists as to the homestead.



2. The exemption is from the debts of the head of the family, the owner of the homestead. It accrues to the heirs of the party having taken or enjoyed the benefit of it. Where such owner dies, leaving surviving him a widow and children, the right of the widow, if the estate is an intestate estate, is restricted to dower, and the benefit of the exemption as to the remainder of the estate in the homestead, after allowing dower, enures to the benefit of the children.

3. If the estate is a testate estate and the devise to the widow is inconsistent with dower, then the widow is put to her election between the will and dower, and, if she does not elect dower within one year after the probate of the will, she is confined to the will, in which event the benefit of exemption as to the entire homestead enures to the children, as the homestead is not the subject of a testamentary disposition by the head of the family.

4. Where, in case of the wife surviving the husband, he dying testate, leaving her executrix with power of sale under the will, she executes a mortgage of the homestead under an order of court, the children surviving, not being parties to such proceeding, are not bound by it.

5. To all proceedings affecting the homestead upon the death of the head of the family, his heirs are necessary parties.

**CONSTITUTIONAL CONVENTION.**—The question of calling a Constitutional Convention is a prominent one before the people of the State. It seems to be generally conceded that one should be called, but upon the manner of calling it there are differences, some contending for the immediate submission of the question to the people, while others argue for the more dilatory course marked out by the Constitution. On this subject the Governor says:

The last Legislature passed a resolution looking to the calling of a Constitutional Convention for an entire revision of the organic law of the State. That the Constitution needs revision in many important particulars is, I believe, conceded by all. Indeed, in all its departments, legislative, executive, and judicial, important changes are required in the interest of economy, and to more properly conform it to the requirements of the people and the true principles of republican government.

**ELECTION RETURNS.**—In November Congressmen, half of the Senate, and the entire Assembly, were elected. The new congressional districts consist of the following counties: 1. Calhoun, Escambia, Franklin, Gadsden, Hernando, Hillsborough, Holmes, Jackson, Jefferson, Lafayette, Leon, Levy, Liberty, Manatee, Monroe, Polk, Santa Rosa, Taylor, Wakulla, Walton, Washington; 2. Alachua, Baker, Bradford, Brevard, Clay, Columbia, Dade, Duval, Hamilton, Madison, Marion, Nassau, Orange, Putnam, St. Johns, Sumter, Suwanee, and Volusia.

In the First District, R. H. M. Davidson, Democrat, received 11,246 votes; Emory F. Skinner, Republican, 7,029; D. L. McKinnon, Independent, 3,547; Democratic plurality, 4,217; Democratic majority, 6,701. In the Second District, the vote was: for Horatio Bisbee, Jr., Republican, 13,069; Jesse J. Finley, Democrat, 12,813; Republican majority, 256. The Legislature has 6 Republicans, 17 Democrats, and 9 Independents in the Senate, and 27 Republicans, 34 Democrats, and 15 Independents in the House.

**YELLOW FEVER.**—An epidemic of yellow fever existed in Pensacola during the autumn, but it did not assume serious proportions as on some former occasions. (See EPIDEMICS.)

**FOOD-PRESERVATION.** The problem of protecting meat from septic contamination, without alteration of the flavor and culinary qualities, is an important one with reference to the great waste of food in the ordinary ways of supplying communities. But its economical importance is so much greater, and the prospect of reward surer, since great nations have come to depend largely on supplies brought from across the seas, that chemical inventors have applied themselves in earnest to its solution. Refrigeration is a costly method of arresting putrescent decay, and one subject to accidents; but no better method of keeping dressed meat has been known, and vast quantities have been transported over the ocean in expensive cooling compartments. Carbolic acid and other substances used in antiseptic surgery can not be employed, as they would destroy meat for food. Boracic acid is the only chemical antiseptic which is tasteless and innocuous. It has come into use extensively for the preservation of milk, and as the basis of most of the antiseptic preparations sold. To give it the sufficient degree of solubility, bicarbonate of soda and other substances not entirely innocent are added.

It has been found that boracic acid is not an antiseptic by itself, but acquires that quality by combination with some elements in the substances to preserve which it is used. The character and conditions of the union are undetermined, and its action as a preservative is somewhat uncertain. Professor Barff has sought for a compound with original antiseptic properties, and has discovered it in boroglyceride, a compound of glycerine and anhydrous boric acid, with the formula  $C_3H_5BO_3$ . The water of the glycerine is expelled and replaced by the acid, forming a new compound which is chemically analogous to a fat, being a combination of the base glyceril, or  $C_3H_5$ , with an acid. It is a hard and brittle mass at ordinary temperatures, but acquires a semi-fluid consistency when heated, and is then freely soluble in warm water. It is employed in solutions of one part of boroglyceride to from twenty to sixty parts of water, according to the requirements to be met. The solutions are almost tasteless, and substances treated with them acquire no foreign flavor. Their antiseptic efficacy is remarkable. Meat, oysters, poultry, etc., after immersion in the liquid, will keep for months without any trace of decomposition. Milk and soup are preserved by admixture. The finer gustatory flavor of meat is not retained long in perfection, being probably dependent on volatile elements. A gallon of the solution, in which many pieces of meat can be successively immersed, costs fifteen or twenty cents.

The antiseptic which is considered the best is boracic acid, which alters neither the taste,



nor appearance, nor other quality of the meat. A method has been tested in England by which the antiseptic fluid is introduced into the living body of an animal, and distributed to all parts of the carcass by the natural action of the heart. The experiment was made with sheep by Hauting, a veterinarian. The animal was first stunned by a blow from a mallet. The jugular vein was opened and a pint of blood drawn out. A rubber tube was then inserted, through which a quart of the preservative liquid was absorbed. This was a saturated solution of boracic acid in water of the temperature of blood. The instrument, one well known in veterinary practice, was then closed, and, two minutes after the liquid was taken up into the circulation, the sheep was slaughtered in the usual way. The acid is very slightly soluble in water. The cost is only half a cent per mutton. The meat thus treated remains fresh without ice two or three weeks in summer, and as many months in winter.

To prepare this new antiseptic compound, glycerine is heated to a high temperature, and boracic acid is added as long as it will dissolve. The proportions are ninety-two parts of glycerine to sixty-two of boracic acid. The compound, if allowed to cool, takes a white, crystalline form. Water is evolved during the operation, and, when steam ceases to be given off, the mass sets in a hard, glacial substance, which shows a loss of fifty-four parts in weight, corresponding to three molecules of water. The hydroxyls in the glycerine unite with the three atoms of hydrogen in the hydrated boracic acid, the anhydrous boric acid ( $\text{BO}_3$ ) taking their place. Its action is like that of a fatty acid, and the resulting compound is formed like the natural fats.

M. Potel has invented a compound which he thinks will supplant sealed tin cans for the conservation of meats. It is a simple mixture of gelatine, glycerine, and tannin. It is semi-liquid when heated; and, when applied in that condition to the surface of the substance to be preserved, it forms an air-tight coating. It is applied at the temperature of  $50^\circ$  Centigrade, which is sufficient to destroy the germs of putrefaction, and hardens into an apparently durable hermetic envelope. He calls the mixture *poteline*, after his own name.

A depot for the storage of meat, fish, fruit, and vegetables has been established at Shore-ditch, in London, by the Great Eastern Storage and Refrigerating Company. There are dry-air refrigerating chambers, insulated with a new non-conducting material, which takes much less room than ordinary insulating substances. For the eight large chambers two refrigerators, capable of cooling 100,000 cubic feet of air per hour, are driven by two double-cylinder gas-engines, indicating nearly two hundred horsepower. This company acts as agent and consignee for shippers of dressed meat from America, Canada, and Australia, and expects to supply the London markets with a certain

quantity daily, so that cargoes arriving simultaneously will not cause losses to the shippers.

**FORESTS OF THE UNITED STATES.**  
**CONDITION OF AMERICAN PINE-FORESTS.**—A survey has been made, in connection with the compilation of the tenth census of the United States, of the forest resources of the whole country, with especial reference to the supply of pine-timber, the results of which have been published in a series of "Forestry Bulletins," showing for the several States the amount, by board-measurement, of timber yet standing, and graphically, by maps, the quantity of land still covered with timber available for use in each. To this is appended, in the tables, an estimate of the amount of timber cut in each State during the year of the census, and, in the maps, a representation of the area from which the timber has been removed.

The principal source of supply for white-pine lumber is still in the Northwestern Lake States, including Michigan, Wisconsin, and Minnesota. In these States there were standing, in the spring of 1880, 82,010,000,000 feet of merchantable pine, of which 41,000,000,000 were in Wisconsin, 35,000,000,000 in the two peninsulas of Michigan, and 6,100,000,000 in Minnesota. The amount of pine cut in these three States during the year was 7,035,507,000 feet. At this rate of destruction those States would be stripped of their pine-forests in less than twelve years. A rapid growth in consumption is, nevertheless, taking place; for, while according to the returns of the ninth census 3,912,199,000 feet of lumber, including hard-wood, were manufactured in these States, the amount had increased, in 1880, to 7,145,969,000, or by 83 per cent, and this notwithstanding 1870 was a year of greater relative prosperity and production than 1880. Some allowance is due, however, for the greater thoroughness with which the statistics for 1880 were collected, in consideration of which the ratio of increase might be reduced to 70 per cent. There still remain 1,800,000,000 feet of white pine and 4,500,000,000 feet of hemlock in Pennsylvania, and 475,000,000 feet of white pine and 5,000,000,000 of spruce in Maine, with scattering small tracts of white pine in Pennsylvania, and a considerable unestimated quantity of second-growth pine in Maine. The original white-pine forests of New Hampshire and Vermont are exhausted, but both those States have small quantities of second-growth pine available for use, and 2,265,000,000 feet of black spruce (*Picea nigra*.)

The four Atlantic southern pine-growing States contain, of long-leaved pine (*Pinus australis*): North Carolina, 5,229,000,000; South Carolina, 5,316,000,000; Georgia, 16,778,000,000; and Florida, 6,615,000,000; in all, 33,938,000,000 feet. In the same States, 713,700,000 feet were cut during the census year. Much of the timber still standing has been injured in the manufacture of turpentine.



The Gulf States and the Southwestern States are still competent to furnish immense supplies of their native pines suitable for timber, from which comparatively little has as yet been drawn. The estimates are: Alabama, long-leaved and short-leaved pines (*Pinus australis* and *Pinus mitis*), 21,192,000,000 feet; Mississippi, the same species, 23,975,000,000 feet; Louisiana, the same species, 48,213,000,000 feet; Arkansas, short-leaved pine (*Pinus mitis*), 41,315,000,000 feet; Texas, long-leaved pine (*Pinus australis*), short-leaved pine (*Pinus mitis*), and loblolly pine (*Pinus taeda*), 67,508,500,000 feet; in all, 202,203,500,000 feet. The long-leaved pine, which forms the mass of the timber of the Southern Atlantic coasts, and constitutes about two fifths of the timber of the five States last named, is considered more suitable for heavy constructions than the white pine of the North, but is harder to work, and inferior to white pine for the uses to which that wood is so extensively applied on account of its fullness of resin. The short-leaved pine of Arkansas, Louisiana, and Eastern Texas, is regarded as a valuable building material, but not as desirable as either the white or the long-leaved species. The Southern forests are destitute of undergrowth, and have been periodically burned over; and there is little probability of their place, when they have been once removed, being taken by a natural second growth.

Except in the case of the redwood-forests of California, no attempt has been made to estimate the amount, in feet, of the timber-supply of the Pacific States. The redwood (*Sequoia sempervirens*), the best substitute for white pine, forms a strip of forests of gigantic trees along the coast of California, from the northern boundary of the State to below the Bay of Monterey, which contained in 1880, 25,825,000,000,000 feet of timber. From these forests 186,635,000 feet had been cut during the year. The forests of California, outside of the redwood belt, and those of Oregon and Washington Territory, are indicated by maps representing their area, and coloring to show their relative density, but not enough is known of the country they cover to make any estimate of their capacity possible. They are very dense, and consist chiefly of coniferous trees of different species of very large growth, with chestnut-oaks (*Quercus densiflora*) in the northern coast-regions of California, and chestnut-oaks in the southern part, and the Pacific white oak (*Quercus Garryana*) in the river-valleys of Oregon. The most valuable and the prevailing tree is the red or yellow fir (*Pseudotsuga Douglasii*), which is the most important tree of the Coast Range forests of California, and forms seven eighths of the forests of Oregon and Washington Territory. It is a strong, resinous timber, hard to work, better suited for purposes of outside construction than for other uses, and is not regarded as equal to the long-leaved pine of the Southern States, while it is

far inferior for general purposes to white pine and redwood. Except the oaks which have been mentioned, the Pacific forests contain no hard-woods.

These reports of the Census Bureau give an accurate measurement of the waste of American forests, which had previously been only a subject of vague estimate. They show that the States which were once the "timber States" of the country—the Northern New England States, New York, and Pennsylvania—can not be included in that class any longer; and that the States whence the present supplies are drawn will soon cease to furnish them. The whole amount of white pine cut in the United States during the census year was about 11,000,000,000 feet; this, if continued, would exhaust the total supply of the country in eight or ten years. The capacity of the Canadian forests has not been as accurately measured as that of the forests of the United States, but it is estimated that they can not be depended upon for more than about five years' supply at the rate of consumption prevailing in the United States. The forests of the Southern States and the Pacific coast contain immense quantities of other timber which might be substituted for white pine; but it is only a question of time when they will be as recklessly attacked as the forests of the North, and when they in their turn shall be nearly exhausted.

AREA OF FORESTS IN EUROPE.—It is calculated, by those who have devoted attention to the condition of different countries with respect to their forests, that the well-being of a country is best promoted when 25 per cent of its area is left in forest. In all Europe the percentage of woodland area is a little less than 30. In Russia and Finland, it is 40; in Sweden and Norway, 34.1; in Austria, 29.1; in Germany, 26.1; in Turkey and Roumania, 22.2; in Italy, 22; in Switzerland, 18; in France, 17.3; in Greece, 14.3; in Spain, 7.3; in Holland and Belgium, 7; in Great Britain, 4.1; and in Denmark, 3.4.

AMERICAN FORESTRY CONGRESS.—The rapid waste of the forests of the United States has been for several years growing in prominence as a subject of consideration, and an increasing degree of attention has been given to the study of means for preventing further destruction of woods and remedying that which has already been made. National and State laws have been enacted to encourage the planting of trees on the prairies, where the lack of them has been felt from the beginning of settlement; but the denudation of regions once well wooded, which threatens to bring complete ruin upon them as agricultural lands, has not been opposed by any efficient legislation. Much has been done, however, by voluntary effort and association to call attention to the matter, and to start a popular movement for the protection of the forests that may result in securing practical and efficient measures. The American Forestry Association was formed



in 1875, for the advancement of the purpose, and to collect and disseminate information on the subject; it was merged, in 1882, in the newly organized American Forestry Congress. The latter organization was formed at a preliminary meeting held in Cincinnati, Ohio, in April, and an adjourned meeting held in Montreal, Canada, in August. At the Cincinnati meeting, George B. Loring was chosen president of the organization, and vice-presidents were designated for eleven districts representing geographical and botanical areas in the United States and Canada. Sections were organized on the "Use of Forests," "Conservation and Practical Forestry," "Influences," and "Education," in which eighty-five papers on topics related to the main subject were read or filed. Committees were appointed to report upon forest experimental stations, forest-fires, and injuries to forests by cattle, the best methods of tree-planting, and forestry education, and also to present memorials to State Legislatures upon the establishment of State Forestry Commissions. The meeting closed with an "arbor-day," signalized by the planting of "memorial trees" in the park, which it was hoped might help to enlist popular interest in the objects of the meeting. At the Montreal meeting, a union was effected with the American Forestry Association; the constitution of the Congress was completed and adopted; and fifty-eight papers were read or filed. The Congress, by resolution, declared it to be its duty to draw the attention of the national and State governments to the necessity of protecting effectually the forests against fires; and a committee appointed to carry this resolution into effect made arrangements for the preparation of especial papers on forest-fires and on the white pine. Action was taken to encourage the formation of local forestry associations.

**LEGISLATIVE ENCOURAGEMENT OF TREE-PLANTING.**—By the "Timber Culture Act" of the United States, as amended in 1878, a head of a family, who is twenty-one years of age, may, upon the payment of fees amounting to about fifteen dollars, enter upon not more than 160 acres of prairie-land or land otherwise devoid of trees, for the cultivation of timber. He must then break five acres of the land and cultivate it, during the first year after entry; five acres more during the second year, and in the third year must plant with trees, tree-seeds, or cuttings, the five acres first broken, and so on, till one fourth of the tract has been thus put under cultivation. At the end of eight years, or within five years afterward, upon showing that he has put the required amount of land under the cultivation contemplated, and has planted it with suitable trees not fewer than 2,700 to the acre, of which not fewer than 675 to the acre are living and thrifty, he is entitled to a patent for the whole tract he has entered, upon payment of an additional fee of four dollars. A list of trees suitable to be

planted is specified in the law, which the department has declared to be intended only as a general guide, and not designed to exclude any trees recognized in the neighborhood as of value for timber, or for commercial purposes, or for fire-wood and domestic use. Of the various State laws that have been enacted to encourage the planting of trees, that of Iowa is regarded as well adapted to the purpose. It provides that for every acre of forest-trees planted and cultivated for timber within the State, the trees on which are not more than twelve feet apart, and are kept in a healthy condition, the sum of one hundred dollars shall be exempted from taxation. A law passed in Canada in May, 1882, provides that for every acre of land planted in trees the planter, being the owner or tenant thereof, shall be entitled, after the trees have been planted for three years, and shown to be in a vigorous and healthy state, and provided the land is securely fenced against both sheep and cattle, to receive a land-order for the purchase of other land, not exceeding twelve dollars in value. No land, however, can be acquired under this law, except it be of at least fifty and not more than a hundred acres in extent. If the plantations are not sufficient to fulfill this condition, the defect may be made up in money. A law of the Province of Quebec, passed in 1882, imposing restrictions upon the firing of wood in forests, limits the time in which brush may be burned for clearing lands to between the 1st of July and the 1st of September. In the State of Maine the practice now prevails of cutting out only the large trees from the woods and carefully protecting the remainder. This allows the forests to be profitably worked at stated periods of from fifteen to twenty years, and insures their permanence. A forestry commission has been appointed in New Hampshire, and has already instituted measures for collecting information relative to the clearing of the forests of the State, and the injury caused thereby to the water-supply. A similar commission has more recently been appointed by the Legislature of Vermont, and is instructed to investigate the whole subject of the condition of the forests, and the measures needed for their protection.

**SPECIES FOR FOREST-PLANTING.**—The kinds of trees which it is found most profitable to plant vary with the locality. For the prairies and plains of Kansas and Nebraska the cottonwood and black walnut are most in favor for general purposes, and next to these the box-elder and some kinds of maples. The cottonwood fixes itself readily in the soil, grows with great rapidity, and is good for fire-wood and for general domestic purposes. It has also been found to be very useful in furnishing a shelter for the more delicate species which may be destined ultimately to be more valuable; and, at whatever age it is cut, it always makes a good return for the care that has been



expended upon it. The black walnut grows well in the prairies, and is one of the most valuable timber-trees. In many of the older States, the undergrowth which springs up after the original woods have been cut away is found to be capable of becoming an excellent forest if it is taken care of and trimmed. A growth representing a large variety of hard-wood and coniferous trees is springing up in some parts of Michigan from which the forests have been cut, which might ultimately be made as valuable as the original woods. Not all the land from which the trees are cut is, however, capable of spontaneously producing a useful second growth. Replanting with white pine is recommended for Michigan. Among the less common trees, the catalpa and the ailantus are recommended as good growers, and as furnishing durable wood, and wood suited to domestic uses.

**SUCCESSFUL AND EXPERIMENTAL PLANTATIONS.**—Some of the most conspicuous examples of successful forest-planting may be seen in the dunes and Landes of Southwestern France. The dunes, shifting sand-hills extending for a hundred miles along the coast between the Gironde and the Adour, were planted toward the end of the last century with the maritime pine, and have now become fixed forests 148,200 acres in extent. The Landes, an extensive waste tract of swamps and sands, infested with miasmatic fevers, were subjected about thirty years ago to a process of drainage, and were planted with trees. They now constitute a million and a half of acres of maritime-pine lands; they furnish abundantly fire-wood, charcoal, staves, telegraph-poles, posts, railway-ties, mining-props, hewed timber, and sawed lumber, and yield large supplies of turpentine under a system of collection that does not exhaust the trees; and the former wretched, half-barbarous inhabitants have become an industrious, enterprising, and thrifty population. At Larchwood, Iowa, a plan has been experimentally adopted of planting the central forty acres of each section of land with forest-trees, by which each tract of one hundred and sixty acres is given a wood-lot of ten acres, and promises well, both for the growth of the trees and the provision of the land. Another experiment has been made on the shores of Lake Michigan, near Waukegan, Ill., of planting five hundred acres of waste, marsh, and sandy land, with Scotch, Austrian, and white pines, ailantus, and catalpa.

**LUMBER INDUSTRIES OF THE UNITED STATES.**—A table of statistics of the lumbering industries of the United States for the year ending May 31, 1880, shows that there were produced during that year, at 25,708 establishments, 18,091,353,000 feet of lumber (board-measure), 1,761,788,000 laths, 555,504,000 shingles, 1,248,226,000 staves, 146,523,000 sets of headings, 34,076,000 feet of spool and bobbin stock (board measure), and other products to the value of \$2,682,668. The value of the logs

consumed in making these goods was \$139,836,869; the total value of all the products was \$233,367,729. The capital invested in the factories was \$181,186,122. The business was most extensively carried on in Michigan, where \$39,260,428 were invested, and the value of the products was \$52,449,928, while the largest number of establishments (2,827) was in Pennsylvania, which stood second (\$22,457,359) in value of products. The third State in respect to value of investments and products was Wisconsin, where \$19,824,059 of capital were employed, and the total value of the products was \$17,952,347.

**CONSUMPTION OF FOREST PRODUCTS AS FUEL.**—A partial estimate of the consumption of forest products as fuel in the United States during the census year has been published by the Census-Office. The total amount of wood consumed is given at 145,778,187 cords, and its value is fixed at \$321,962,373. The table shows, further, that 74,008,972 bushels of charcoal were consumed, the value of which was \$5,276,736. Of the wood, 140,537,439 cords, the value of which was \$306,950,040, were consumed for domestic purposes; 1,971,813 cords, valued at \$5,126,514, by railroads; 787,862 cords, valued at \$1,812,083, by steamboats; 1,157,522 cords, valued at \$3,978,331, in the manufacture of brick and tile; 624,845 cords, valued at \$3,548,285, in mining and amalgamating the precious metals, and other mining operations; and the rest in the manufacture of salt and wool.

**FUEL-VALUE OF DIFFERENT WOODS.**—A determination of the fuel-value of some of the more important woods of the United States, made by the Forestry Bureau of the Census Department, represents the results of analysis and experiments upon fifty-five species, natives of all parts of the country. The most valuable species for fuel by volume is the mountain mahogany (*Cercocarpus ledifolius*) of the Pacific coast, and it is followed by the Southern long-leaved pine (*Pinus australis*), shell-bark hickory, chestnut-oak, pitch-pine, and other varieties of hickory, pine, oak, and hard-wood trees.

The different species of oak, however, vary widely in their value by volume. The most valuable tree, by weight, is the Southern pine, and it is followed by the pitch and yellow (*mitis*) pines, cypress, yellow pine (*ponderosa*), of the Pacific region, and other conifers; and among the broad-leaved trees, the mesquite (11), sugar-maple (12), aspen (13), cotton-wood (15), and white ash (17). The least valuable woods in volume, among the Atlantic species, are hemlock, aspen, black spruce, white pine, tulip-tree, and yellow or white cedar (*Thuja occidentalis*). The least valuable in respect to weight are the persimmon (50), black oak (*Quercus tinctoria*) (51), tulip-tree (52), water-oak (*Quercus aquatica*) (53), black-jack (*Quercus nigra*) (54), and the white oak of the North Pacific (*Quercus Garryana*) (55).



FRANCE, a republic of Western Europe. The third republic was established by proclamation September 4, 1870. By the law of February 25, 1875, the legislative power is vested in the two Houses of the National Assembly, the Chamber of Deputies and the Senate. The deputies are elected by universal suffrage for the term of four years. Under the law of the *scrutin d'arrondissement*, passed November 11, 1875, each *arrondissement* of under 100,000 inhabitants elects one deputy. An additional deputy is allowed if the population exceeds 100,000, two if over 200,000, and so on. The Chamber of Deputies contains 557 members. The Senate is composed of 300 members, 75 of whom are appointed for life, the vacancies being filled as they occur by the Senate. The rest are elected for nine years, one third of them retiring every three years. They are appointed by an electoral college, to which each commune and municipality sends a member. The National Assembly meets annually on the second Tuesday in January, unless summoned earlier by the President, and remains in session at least five months. An extraordinary session can be called by the President on his own motion, or upon the demand of one half the members of each House. The President can order an adjournment for not more than one month and not oftener than twice in one session. The President of the Republic is elected for the term of seven years by a majority of the votes of both Chambers united in joint session. The President, as well as either Chamber, can initiate legislation. With the approval of the Senate the President can dissolve the House of Deputies. The President promulgates the laws and sees to their execution. He has control of the military forces, and makes all appointments, civil and military. The Ministers are collectively responsible for the general policy of the Government to both Chambers. The President can only be removed for high-treason.

The President of the French Republic is Jules Grévy, born August 15, 1808. He was elected January 30, 1879.

AREA AND POPULATION.—In the census of December 18, 1881, the total population of France was found to be 37,672,048. The total area is 528,571 square kilometres, or 203,285 square miles. Before the separation of Alsace and Lorraine the area was 543,051 square kilometres, and the population, at the census of 1866, 33,067,064. In 1872 the population was 36,102,921; in 1876, 36,905,788. Of the total population, 36,069,524, or 97.74 per cent, are of French birth; 801,754, or 2.17 per cent, foreign citizens; and the remaining 34,510 naturalized citizens. Of the foreign population 374,498 are Belgians, 165,313 Italians, 62,437 Spaniards, 59,028 Germans, 50,208 Swiss, 30,077 English, and 9,855 Americans. In respect to religion 35,387,703, or 98 per cent, are Catholics; 580,757, or 1.6 per cent, Protestants (Calvinists 467,531, Lutherans 80,117,

other confessions 33,109); 49,439, or 0.14 per cent, Israelites; 3,071 of other non-Christian faiths; and 81,951, or 0.23 per cent, of no religion. In the departments of Drôme, Doubs, Deux-Sèvres, Ardèche, and Lozère from 10 to 15 per cent, and in Gard 28 per cent of the population are Protestants. In 1880 the number of marriages was 279,035, against 282,776 in 1879, 279,650 in 1878, 278,094 in 1877, and 291,393 in 1876; the number of births, including still-born, was 961,914, against 980,404 in 1879, 980,590 in 1878, 987,963 in 1877, and 1,011,362 in 1876; the number of deaths, including still-born, was 900,074, against 883,757 in 1879, 882,349 in 1878, 845,343 in 1877, and 878,754 in 1876; and the excess of births over deaths was 61,840 in 1880, against 96,647 in 1879, 98,241 in 1878, 142,620 in 1877, and 132,608 in 1876. The total emigration in 1877 was 3,666, of which number 917 departed for Buenos Ayres, 890 for Algeria, and 550 for the United States. The towns of over 30,000 inhabitants in 1881 were the following:

Paris.....	2,269,028	Dijon.....	55,458
Lyons.....	376,618	Le Mans.....	55,347
Marseilles.....	360,099	Tours.....	52,209
Bordeaux.....	221,305	Tourcoing.....	51,895
Lille.....	178,144	Grenoble.....	51,371
Toulouse.....	140,289	Versailles.....	48,324
Nantes.....	124,319	Troyes.....	46,067
St. Etienne.....	123,513	St. Quentin.....	45,888
Rouen.....	105,906	Boulogne.....	44,542
Le Havre.....	105,567	St. Denis.....	43,895
Reims.....	93,328	Clermont.....	43,038
Roubaix.....	91,757	Beziere.....	42,915
Amiens.....	74,170	Caen.....	41,503
Nancy.....	73,225	Bourges.....	40,217
Toulon.....	70,103	Lorient.....	37,512
Angers.....	68,049	Avignon.....	37,657
Nice.....	66,279	Dunkerque.....	37,323
Brest.....	66,110	Poitiers.....	36,210
Limoges.....	63,765	Cherbourg.....	35,691
Nimes.....	63,552	Cette.....	35,517
Rennes.....	60,974	St. Pierre les Calais.....	33,200
Orléans.....	57,264	Angoulême.....	32,567
Besançon.....	57,067	Perpignan.....	31,735
Montpellier.....	56,005		

There were in 1881 6,158 post-offices. The mails carried 569,910,358 letters, 32,224,239 postal-cards, 11,327,262 letters with inclosures of declared value, 345,364,572 newspapers, and 378,075,770 samples and circulars. The receipts amounted to 123,472,000 francs, and the expenses to 81,898,988 francs.

The number of telegraph-offices in 1881 was 5,841. The length of the state lines at the end of 1881 was 73,878 kilometres, of which 685 kilometres were under-ground, 3,452 submarine, and 103 pneumatic. The length of wires was 233,057 kilometres, 12,521 of which were under-ground and 3,663 submarine. The number of dispatches sent in 1881 was 17,514,147 domestic and 1,952,017 international. The receipts were in 1881 25,612,399 francs, expenses 32,222,642 francs.

The number of kilometres of railroad in operation on the 1st of January was 1,999 belonging to the Government, 21,753 belonging to unchartered companies, 1,515 to companies, and 2,152 of local lines.

COMMERCE.—The special imports in 1881, that is, all non-dutiable goods and those on



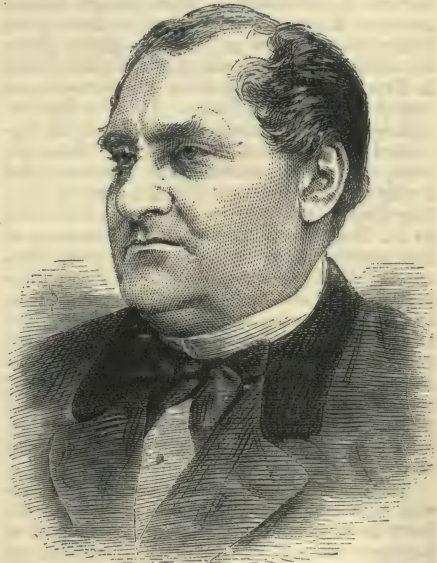
which duties have been paid, amounted to 4,946,400,000 francs, as compared with 5,033,200,000 francs in 1880, 4,595,200,000 francs in 1879, 3,536,700,000 francs in 1875, an average of 3,342,500,000 francs between 1869 and 1873, and of 2,121,100,000 francs between 1859 and 1863. The special exports, that is, domestic products and foreign exports on which duty has been paid, amounted to 3,612,400,000 francs in 1881, 3,467,900,000 francs in 1880, 3,872,600,000 francs in 1875, 3,259,700,000 francs average between 1869 and 1873, and 2,271,000,000 francs between 1859 and 1863. The specie imports in 1881 amounted to 363,200,000 francs, the exports to 302,200,000 francs. Of the total imports of 1881, 2,188,982,000 francs were articles of consumption, of which 583,696,000 francs were cereals (against 844,343,000 francs in 1880), 383,424,000 francs fermented liquors, 288,534,000 francs colonial produce, 29,427,000 francs tobacco, 285,638,000 francs seeds, fruits, and vegetables, and 363,884,000 francs animal food articles and animals (against 419,987,000 francs in 1880). The exports of articles of consumption amounted to 915,856,000 francs, against 865,601,000 francs in 1880. The imports of raw materials in 1881 amounted to 1,893,130,000 francs, against 1,856,586,000 francs in 1880, the imports of textile materials in 1881 being 1,063,963,000 francs; of woods, etc., 245,479,000 francs; of hides, hair, and leather, 185,364,000; of raw metals, 140,724,000 francs. The exports of raw materials amounted to 554,125,000 francs, against 540,073,000 francs in 1880, the exports of textile materials making the chief item and amounting to 384,844,000 francs. The imports of manufactured articles amounted to 558,042,000 francs, against 490,957,000 francs in 1880, the principal items being textiles (241,577,000 francs), and machines and metallic products (131,002,000 francs). The exports of manufactured objects amounted to 1,787,313,000 francs, against 1,736,975,000 francs in 1880, the largest items being textiles and articles of dress (948,993,000 francs), leather manufactures, etc. (290,223,000 francs), jewelry and works of art (148,919,000 francs), and metallic products, machines, etc. (145,385,000 francs). The other classes of imports amounted to 555,673,000 francs, exports to 355,148,000 francs.

The largest foreign trade is with England, amounting to 599,000,000 francs of imports and 830,200,000 of exports in 1879. The largest import trade is with the United States, from which 715,900,000 francs of imports were received, and to which 276,200,000 francs of exports were shipped. The total trade with the French colonies amounted to 227,100,000 francs of imports and 190,400,000 francs of exports.

The number of vessels entering French ports in 1881 was 34,520, of 11,675,746 aggregate tonnage, of which 9,966 carried French colors, tonnage 3,721,714; the number departing was 23,373, tonnage 7,527,146—8,072 of 3,358,136 under French colors. The merchant marine

at the beginning of 1881 consisted of 14,406 sailing-vessels, of 641,539 tons, and 652 steamers, of 277,759 tons. Of the total number of 15,058 vessels, of 919,298 aggregate tonnage, employing 92,397 persons, 9,987, of 134,983 tons, crews 54,928 persons, were engaged in fisheries; 2,399, of 111,599 tons, in coasting; 1,743, of 643,406 tons, crews 24,843, in ocean commerce; and the remaining 929 were vessels employed in port service and yachts.

**COLONIES.**—The principal colony of France is Algeria, having an area of about 430,000 square kilometres, and a population in 1877 of 2,867,626 souls. The population of the three civil departments in 1877 was 1,551,109, their area 41,599 square kilometres. In 1880 their boundaries had been extended to include 73,835 square kilometres, and a population of 1,884,124 souls. The population of Algeria is divided in respect to nationality into 198,092 French, 33,506 naturalized Israelites, 2,477,641 native Mussulmans, and 158,387 from other countries, among them 94,038 Spaniards, 26,322 Italians, and 14,313 English. The three capital cities are Algiers, containing in 1880 64,714 inhabitants; Oran, containing 59,429; and Constantine, containing in 1876 89,823.



PRINCE NAPOLEON (JEROME).

The area and population of the colonies and protectorates, exclusive of Madagascar, with an area of 691,901 square kilometres, and a population estimated at 5,000,000, and Tunis, with an area of 118,400 square kilometres, and a population of about 3,000,000, together with the exports and imports of the colonies other than Algeria, in 1879, and their budgets for 1882 (all in thousands of francs), are given in the following table:

COLONIES.	Square. kilometres.	Population.	Imports.	Exports.	Budgets.
<b>ASIA:</b>					
French East Indies.....	508	285,022	8,184	19,919	1,721
Cochin-China.....	59,457	1,597,013	46,196	53,849	16,568
Cambodia.....	83,861	1,500,000	.....	.....	.....
Tonquin.....	200,000	15,000,000	.....	.....	.....
<b>AFRICA:</b>					
Algeria.....	490,000	2,867,626	.....	.....	.....
Senegal and dependencies.....	250,000	197,481	14,514	18,928	2,856
Cold Coast and Gaboon.....	2,300	8,000	.....	.....	.....
Reunion.....	2,511	193,862	25,775	27,228	4,950
Mayotte.....	866	12,000	1,284	1,749	241
Nossi-Bé.....	293	19,150	1,458	1,589	229
Ste. Marie de Madagascar.....	174	7,185	116	85	.....
<b>AMERICA:</b>					
Guiana.....	121,418	27,082	7,822	423	1,811
Martinique.....	987	164,850	20,816	88,923	8,888
Guadeloupe and dependencies.....	1,866	193,883	28,021	23,848	4,625
St. Pierre and Miquelon.....	285	6,224	9,469	11,137	295
<b>OCEANIA:</b>					
New Caledonia and dependencies.....	19,950	72,134	9,010	8,860	1,915
Tahiti and dependencies.....	9,388	87,522	8,212	1,216	1,000
Total.....	753,811	19,805,608	186,727	207,085	89,052

Of the colonial expenditures of 1879, the French Government furnished in subventions 1,253,000 francs, leaving 37,799,000 francs as the amount raised in the colonies.

**TUNIS.**—The Treaty of Kas-el-Said, made May 12, 1881, provided for a French protectorate over Tunis, which was completed by the laws of April 22, 1882. The different departments of the public service undertaken by the French Government in Tunis are placed under the direction of the corresponding ministries in France, which give their directions to the minister resident at Tunis. The Bey Mohammed-es-Sadok, who was born in 1813 and succeeded his brother Mohammed September 28, 1859, died October 28th. He was succeeded by his younger brother, Sidi Ali, born in 1817. The French minister resident who succeeded to M. Roustan is M. Cambon. The area of the regency of Tunis is 116,348 square kilometres, the population about 2,100,000, including some 45,000 Israelites and 25,600 Christians. The public debt has been reduced by the European commission, which was given control of the finances, to about 125,000,000 francs. The revenue, derived from export duties, tax on olive-trees, salt and tobacco monopolies, etc., was, in 1875, 6,832,300 francs, nearly all of which was applied to the service of the debt.

**ARMY AND NAVY.**—Universal military service was established by the law of July 27, 1872, by which every Frenchman is obliged to belong to the active army for five years, to the active army reserve four years, to the territorial army five years, and to the territorial army reserve six years. The effective of the army in 1882 was as follows: Infantry—144 regiments of the line, of four active battalions, of four companies each, and two companies at the depot, numbering 288,464 men; thirty battalions of rifles, or chasseurs, numbering 17,730 men; four regiments of zouaves, numbering 10,480 men; three regiments of Algerian sharpshooters, numbering 8,493 men; the Foreign Legion in Algiers, numbering 2,526

men; three battalions of light infantry in Algiers, numbering 4,140 men; and fusiliers and pioneers forming the corps of instruction, numbering 1,330 men; altogether 283,163 officers and men, with 2,631 horses. Cavalry—twelve regiments of cuirassiers and twenty-six of dragoons, and twenty regiments of chasseurs and twelve of hussars, of five squadrons each, numbering altogether 58,240 men, with 51,800 horses; four regiments of Chasseurs d'Afrique, numbering 4,152 men, with 3,720 horses, and three regiments of Spahis, numbering 3,477 men, with 3,423 horses; nineteen squadrons of scouts to be formed in time of war; and eight companies for the remounting service, numbering 3,038 men, with 80 horses; total effective force 68,907 men, with 59,023 horses. Artillery—nineteen regiments organized in division and nineteen attached to corps, together 57 battalions of foot, 304 of mounted and 57 of flying artillery, and 76 of mounted artillery at the depots, numbering together 55,717 men, with 30,381 horses; and the corps for pontoon-service, repairing, the artillery train, etc., making the total effective force 68,762 men, with 33,298 horses. Engineers—11,007 men, with 945 horses. Train—9,540 men, with 8,918 horses. Staff and administrative troops—27,990 officers and men, with 4,888 horses. Gendarmerie—26,511 men, with 13,013 horses. The total effective of the French army is 495,880 men, with 122,716 horses. The war effective numbers 2,423,164 men, organized in 24 complete corps in the first line, and 8 corps in the second line; to which number may be added about 1,330,000 excused or non-combatants. By a law introduced July 26, 1882, the African army is to be increased, by which the active army will receive an augmentation of 23 infantry battalions, 18 squadrons of cavalry, 15 batteries of artillery, and a corresponding number in the auxiliary services. The French infantry is armed with the Gras rifle, a species of Chassepôt with metal cartridges. The artillery has cast-steel breech-loading guns of 80 and 90 millimetres' caliber.



The French navy in 1881 numbered 356 vessels, classified as follows: 59 ironclads, comprising 20 of the first class and 12 of the second class for offensive and defensive warfare, and 27 for coast-defense, including 11 floating batteries; 235 steamers, comprising 57 cruisers, 17 dispatch-vessels, 22 fleet dispatch-boats, 21 gunboats, 61 transports, 26 small gunboats, 31 torpedo-boats, and 62 sailing-vessels. There were in construction 8 first-class ironclads, 2 second-class ironclads, 2 ironclad gunboats, 11 torpedo-boats, and 22 other vessels. The navy is manned with 1,585 officers and 41,227 seamen, 3,940 men in the special services, 18,870 marine infantry, and 4,661 artillery. The heaviest ironclads are the *Devastation* and the *Foudroyante*, each of 9,600 tons and 4,200 horse-power, carrying 14-inch armor and four 38-ton and two 25-ton guns. The *Amiral Duperré* has 12-inch plates and is armed with four 38-ton guns. Six new steel-clads with horizontal plates 11½ inches thick carry two 38-ton guns each, mounted in barbette. Five others of the ironclads are of modern types and heavily armed, while the rest of the vessels classed as ships of combat are of obsolete construction.

**FINANCE.**—The sources of revenue at the disposal of the French Government have expanded remarkably in the last fifty years. After the Franco-German War, the augmentation of the debt and the increased cost of the army necessitated a large increase in taxation. In the year 1869 the total revenue of the Government amounted to 1,798,193,568 francs. In 1873 the total revenue was 2,467,470,630 francs; the expenditure 2,374,804,134 francs. In 1881 the budget of revenue was 3,214,534,789 francs, and of expenditure 3,213,806,317 francs. The budget estimates for 1883 place the total receipts at 3,561,977,092 francs, and the total disbursements at 3,573,349,646 francs. The following are given as the sources of revenue: Direct imposts, 378,100,500 francs, of which 175,500,000 is the estimated product of the land-tax, 63,765,000 francs of personal taxes, 43,772,400 of the tax on doors and windows, and 95,062,100 of patent dues; special taxes of similar character to direct taxes, such as taxes on mortmain property, on carriages, inspection of weights and measures, etc., 24,723,840 francs; registration fees, stamps, and domains, 771,661,000 francs, registration producing 593,827,000, stamps 159,607,000, and the domains, exclusive of forests, 18,227,000 francs; forests, 35,188,900 francs; customs and salt-tax, 404,142,000 francs; indirect taxes, 1,099,306,000 francs, of which 428,309,000 francs come from the tax on drinks, 101,548,000 francs from domestic sugars, 16,139,000 francs from matches, 12,841,000 francs from paper, 92,933,000 francs from railroad traffic, being 20 per cent of passenger receipts; sale of tobacco, 360,437,000 francs; of gunpowder, 15,236,000; post-office, 128,325,000 francs; tele-

graphs, 30,629,000 francs; 3 per cent on incomes from dividends, etc., 47,118,000 francs; revenue from Algeria, 31,380,008; tax on civil pensions, 21,262,000 francs; universities, 3,593,665 francs; fines, 7,534,181; various receipts, 49,866,998 francs. The following are the main branches of expenditure: Public debt, 1,317,112,874 francs, of which 741,070,255 francs are interest on the funded debt, 27,088,000 on temporary loans, 160,000,618 pensions, and 388,954,001 capital payments; dotations, 24,712,456 francs, of which 13,724,000 go to pension the invalids of the navy, and 9,788,456 to the members of the Legion of Honor; legislation, 11,735,780 francs; Ministry of Justice, 35,944,642 francs; of Public Worship, 52,929,306 francs; of Foreign Affairs, 14,348,900 francs; of the Interior, 68,813,655 francs, of which 14,661,550 francs are for expenses of administration, 13,763,537 for public safety, 20,690,961 for prisons, and 10,436,235 for charities; of Finance, 19,558,470 francs; of Posts and Telegraphs, 2,122,360; of War, 584,106,000 francs; of Marine and the Colonies, 237,187,470 francs, of which 204,898,519 francs are for the navy; of Public Instruction and Art, 151,050,196 francs, of which 184,410,451 francs are for education, and 16,639,745 for the fine arts; of Commerce, 21,918,564 francs; of Agriculture, 24,397,350 francs; of Public Works, 139,488,541 francs, of which 89,725,661 francs are for the ordinary service, 49,762,860 for extraordinary works, 317,621,582 for the cost of the *régie*, collection of taxes, post-office, etc., and 21,155,500 for drawbacks and restitutions. There are besides 529,146,000 francs of estimated revenues and expenditures treated of apart from the general budget as extraordinary.

The public debt in 1879 stood at 19,862,035,983 francs, of which 12,101,352,167 francs bore interest at 3 per cent, 6,917,470,240 francs at 5 per cent, and the remainder at 4½ and 4 per cent. The number of holders was 4,380,933, of whom 2,432,574 held the 5 per cent rentes, and 1,788,114 the 3 per cent.

The total cost of the war and foreign occupation of 1870-'73 amounted to 9,287,882,000 francs, of which 5,000,000,000 was the war indemnity to Germany, 1,873,238,000 the war expenditures, 302,065,000 the interest on sums due to Germany, 631,168,000 disbursements in connection with the loans of 1870-'72, 364,189,000 loss from non-payment of taxes during the war, 248,625,000 the cost of maintaining the German army of occupation, 169,518,000 the cost of provisioning Paris, 61,708,000 repayments of fines levied by Germans, 50,000,000 grants to soldiers' families, 38,807,000 cost of foreign occupation of 1871-'73, and 548,564,000 miscellaneous expenses.

The indebtedness of the departments and municipalities was largely increased during the war. The budget of the city of Paris for 1880 estimates the revenue at 233,102,579 francs, of which 125,398,041 are from *octrois*, or tolls



on articles of consumption, and the expenditure at 231,041,489 francs, most of which goes for interest and sinking fund on the debt of 2,295,000,000 francs.

**POLITICS AND LEGISLATION.**—The history of the events of the year in France dates properly from the fall of the Ferry Ministry in November, 1881. The Tunisian expedition had been conducted nearly to a successful termination, but at a terrible cost of lives and treasure. Suspicions of the influence of private speculations on the course of events in Tunis, rumors of personal differences and intrigues in the army, and, most of all, the sufferings of the troops and loss of life caused by the inefficiency of the hospital service and commissariat, had brought the Cabinet into actual odium. The public were alarmed for the republic when a Government, representing the republicanism which had trampled upon the sentiments and traditions of the religious community, and driven the clerical element over to the monarchical minorities, was unable to prevent corruption in high places, and when the army, which is the subject of the most anxious solicitude with all parties, was found as disorganized and mismanaged as when the military forces of the empire collapsed in the German War. The time was come when Gambetta, who was looked upon as the guardian and guiding spirit of the republic, and who had overshadowed every ministry formed since the victory of republican principles in the presidency of MacMahon, must assume the responsible direction of affairs. The hopes of France were centered upon the great orator and Republican leader, who, when he exerted his full political strength, was to compose the faction fights and personal rivalries of the Republican party, and, as the permanent head of the Government, pursuing a continuous policy, to enable France to assert her due position in Europe, which, with ephemeral ministries and a constantly changing policy, was impossible.

When the Assembly met on October 28th, Gambetta tested his strength by again standing as a candidate for the presidency of the Chamber, and was elected with the overwhelming majority of 317 to 47. Jules Ferry himself precipitated his fall by attempting an explanation of Tunisian affairs without waiting for an interpellation. In the debate which followed, the ministers were accused of deceiving the Assembly for electioneering purposes, and with weakening and disorganizing the army by allowing the generals to make up the first Tunisian expedition with troops selected from the different corps. Clemenceau charged Roustan with having instigated the Government to interfere in Tunis in order to further certain financial enterprises. The outcome of the long debate was the adoption, on the motion of Gambetta, of a neutral order of the day which simply approved the Bardo Treaty. Jules Ferry, having failed to obtain the desired expression of confidence, resigned November 10th,

and Gambetta was invited by M. Grévy to form a ministry. Gambetta at first set about forming the "grand ministry" that his organs had heralded, which was to unite the Republican forces in a stable union. But Léon Say, De Freycinet, and Challemel-Lacour declined his overtures. He then made up a list from among his immediate supporters. Dismay and ridicule were excited by the production of the names. Except two retained from the last Cabinet—Cazot, Minister of Justice, and Cochéry, of Posts and Telegraphs—all were new men. The names of the other ministers were: Waldeck-Rousseau, Interior; Allain-Targé, Finance; General Campenon, Military Affairs; Gougeard, Marine; Paul Bert, Education and Worship; Raynal, Public Works; Devès, Agriculture; and Proust, Arts. Gambetta took the department of Foreign Affairs. The appointment of Paul Bert, eminent as a scientific scholar, but best known as an exponent of skepticism, to the post of Minister of Public Worship, was deemed by many a direct insult to the Catholic Church, and regarded everywhere with wonder. The ministerial declaration of principles given in the Assembly on November 15th aggravated the evil impression created by the appointment of M. Bert, and the prospect of a destructive campaign against the Catholic ideas of the function of the Church in the body politic. From the manner of the programme it was suspected that Gambetta had interpreted the national demand for the "formation of a united government, free from the conditions of internal weakness and dissension," not by seeking the co-operation of the other lights of the Republican party, but by assuming the sole direction of the destinies of the nation. The conservative elements were disturbed by the announcement of indefinite constitutional changes, while the radical democracy had long ceased to put their faith in Gambetta. He foreshadowed the reform of the Senate "by wisely limited alterations in the organic law, which would bring the political power into completer harmony with the democratic genius of French society." The reform of the judiciary, the extension of national education, the completion of the military laws, the conclusion of commercial treaties, the strict application of the Concordat so as to insure respect for the political authority in the relations between the Church and the state, and the rigid preservation of order at home and maintenance of peace with dignity abroad, were the other articles of the profession of faith. The programme of the ministry was confidently declared to be that of France. An active opposition on the Extreme Left, and the uncertain attitude of other sections of the Republican party, boded ill for the ministry; but the Chamber waited until their policy was developed. In the departmental activity of the ministry, M. Proust's petty projects excited ridicule, while the new regulations announced by Minister Bert confirmed the gravest fore-



bodings. He admonished certain bishops who had visited Rome that they should obtain leave of the Government before absenting themselves from their dioceses. He announced that prelates ordained in the future would be required to subscribe to the oath prescribed by the Convention of 1801.\* Prefects were requested to furnish reports of the character and antecedents of prelates, and the office of Director-General of Worship was abolished. The Duc de Broglie, in the Senate, accused the Republicans of dissimulation in their Tunisian policy, while, out-of-doors, the testimony in a libel-suit brought by the public prosecutor against Rochefort for his attack upon M. Roustan, and the acquittal of Rochefort, made a damaging impression. With Tunis still far from being pacified, with the question of Senate reform and other measures already announced yet to be settled, with a battle raging between the free-traders and the protectionists over the commercial treaty with England, and after taking a position in Egypt which would entail military intervention, Gambetta, as though aiming to be dictator or nothing, announced the re-introduction of the project of the *scrutin de liste*. Under this system Napoleon III kept up his majority in the Chamber. Instead of each arrondissement electing its own deputies, all the deputies for a department would be voted for on one ticket throughout the department. This favorite scheme of Gambetta's had been rejected by the Senate the preceding June. In the triennial senatorial election on January 8th, the Republicans gained twenty-five seats. Every one but Gambetta saw the difficulty of inducing the Chamber now to change the electoral law under which it had just been elected; yet his organ, the "*République Française*," declared that he would resign if the measure failed to pass. On January 14th it was introduced, coupled with the plan for the revision of the senatorial election law. Instead of allowing petty villages equal representation in the electoral college with the great cities, he proposed to give each municipality a delegate for every five hundred registered voters; and, in the case of the life-Senators, that their term should be reduced to nine years, and that both Chambers should participate in their election. He also proposed to take away the right of the Senate to vote upon financial measures, except in the way of a protest. The committee of the Chamber reported against the *scrutin de liste* section of the proposed electoral law, and on January 26th the Chamber of Deputies rejected a resolution of M. Gambetta in favor of the revival of the collective ticket by two-thirds majority.

Gambetta immediately handed in his resig-

\* "I swear and promise to God, on the holy gospels, to remain obedient and faithful to the Government established by the Constitution of the French Republic. I promise also to have no dealings, to attend no councils, to carry on no league, either at home or abroad, which are contrary to public tranquillity; and if, in my diocese or elsewhere, I learn that anything is being concocted to the prejudice of the state, I will inform the Government thereof."

nation. M. de Freycinet was called upon to form a ministry. He obtained as colleagues the well-known and trusted statesmen of the party. He himself resumed the portfolio for Foreign Affairs, which he had resigned eighteen months before, mainly through Gambetta; Léon Say took the Ministry of Finance, and Jules Ferry that of Public Instruction and Worship; Admiral Jauréguiberry became Minister of the Marine, Varroy of Public Works, and Tirard of Commerce. The members of the new Cabinet who had not held ministerial positions before were Goblet, Minister of the Interior; Humbert, of Justice; Mahy, of Agriculture; and General Billot, of War. The Ministries of Agriculture and of Fine Arts had been created by Gambetta, and the latter was now discontinued.

The policy announced contrasted with the combative and disturbing departure of Gambetta, the main aim being "to make peace prevail in the country, peace in men's minds as well as in the material order of things, peace both at home and abroad." The revision of the electoral laws was postponed, while the reforms in the magistracy, the military service, the laws of liberty of association, and in national education, were to be prosecuted with energy.

During the tranquil ministry of De Freycinet several important measures were carried through. The right of electing their mayors was restored to communes and municipalities, with the exception of Paris. The Radicals cried out against the exclusion of Paris, but the moderate men were not ready to make this concession, involving the patronage of 20,000 offices, to the oft repeated demands of the Parisian democracy for local self-government. A bill to abolish the Concordat was taken into consideration. The principal act of the session was the primary education law (see EDUCATION AND ILLITERACY). The amendment added in the Senate the previous session by Jules Simon, requiring schoolmasters to instruct pupils in their duty toward God and their country, which the Chamber had refused to accept, was now struck out by the Senate freshly recruited with Republicans. The policy of the Government, not being as pacific in religious matters as in other fields, was subjected to sharp attacks from the clerical forces. Monseigneur Freppel, Bishop of Angers, the clerical leader, opposed a grant for the continued occupation of Tunis, and elicited an explanation to the effect that the troops had been reduced from 45,000 to 35,000, and that 5,000 more would soon be withdrawn. There was a struggle over a law allowing a witness objecting to the oath to make a declaration on his "honor and conscience." On the reassembling in May, the Chamber passed Naquet's bill establishing a law of divorce. To prevent the resignation of Léon Say upon the passage of a bill opposed by him, a special vote of confidence was passed.

The Egyptian question found the country

unprepared in mind for any decisive course. The policy of the Government was consequently infirm and characterless. Preserving as long as possible the agreement with England, De Freycinet was warned by the exasperation and distrust produced in the country by the Tunis affair against a military intervention. He tried to shift the responsibility of the arbitrament to the councils of Europe. At the last moment he withdrew his objections to Turkish intervention. But the determining will in Europe was impelled, precisely on account of the indecision of France, to let Egyptian matters take their own course. Gambetta emerged from his retirement to urge determined action, but was unable to rally the warlike and ambitious spirit of his countrymen. Freycinet obtained a preliminary vote of credit to be used in the event of England and France being deputed by the European conference to intervene. He afterward announced that, as the powers had not invited England and France to intervene, he would not join England in reducing the rebellion, but asked, July 24th, for an additional credit to enable French marines to land on the Suez Canal to protect it in conjunction with England. This vote was refused on July 29th by a majority of 416 to 75. The ministry resigned, and the naval preparations were abandoned.

President Grévy was unable at first to find a statesman who would undertake the formation of a new Cabinet. After a delay of nine days Duclerc, a former minister, succeeded in the task. He took the portfolio for Foreign Affairs; De Fallières the Ministry of the Interior; Tirard became Minister of Finance; Devès, of Justice; Duveaux, of Public Instruction; General Billot, of War; Admiral Jauréguibery, of Marine; Cochéry, of Posts and Telegraphs; De Mahy, of Agriculture; Pierre Legrand, of Commerce and Public Works. The latter portfolio was afterward taken by Herisson. Duclerc in his programme promised to be bound by the vote against intervention, and, if events involving the interests or honor of France intervened, to summon the Assembly. He expressed as his principal aim the union of the various sections of the Republican majority. The Chambers adjourned soon after the formation of the Cabinet.

Gambetta occasionally lifted his voice on behalf of the policy which he inaugurated in the three months of his ministry, and in his newspaper advocated personal rule by the popular leader of a democratic state, which he thought necessary for the security and greatness of France. To bring about the political order which he hoped yet to establish, he gave his attention to the development of his new party of the Pure Left. During the vacation of the Chambers, which commenced immediately after the appointment of the Duclerc Ministry, there occurred no event to disturb the political quiet except some excitement among the socialists incident upon strikes and lock-outs in manu-

factories. At Montceau-les-Mines some idle workmen were instigated by politicians to violate a church because the employers with whom they were quarreling entertained clerical sympathies. At Lyons there was an equally aimless demonstration. These trifling disturbances were exaggerated, for the lack of other excitement, into a veritable terror. Government officials were partly responsible for the belief which prevailed for a time that French society was honey-combed with secret societies which were ready to attempt a social revolution. A sequel of the sensational excitement was a remarkable trial of a number of socialists who admitted spreading the doctrines called Anarchism, for which, among others, Prince Krapotkine, the leading journalist of the Russian Nihilists, was sentenced to prison.

At the very end of the year the world of French politics was thrown not merely into momentary consternation, but the republic was apparently unhinged and in danger of disruption, through the death of Léon Gambetta, whom the people mistrusted and turned against when in power. In Germany his death was welcomed as affording relief from the anxiety caused by the menaces of revenge to which he occasionally gave utterance. But the interior tranquillity of France was disturbed by the movements of the Bonapartist and royalist pretenders upon the departure of the strongest man of the republic, while the trepidation and divided councils of the Republicans illustrated the need of the stable government which the ex-Dictator of Bordeaux wished to establish and which the monarchist factions promised.

**FREE RELIGIOUS ASSOCIATION.** The receipts of the Free Religious Association during 1881 were \$1,700, and its expenditures for the same time were \$809. The report of the Executive Committee for the year gave account of the efforts it had made to obtain information from various States regarding legal restrictions on religious liberty, sectarian influences in education, social conditions as affecting free thought, and the condition of liberal organizations in those States. Correspondents were appointed for twenty-one States, and replies more or less complete were received from sixteen States. The committee found that it was the intention of the State constitutions generally to guard religious liberty, and that they assert the rights of the individual conscience in all matters of religion; but that the statutes show a conspicuous violation of the assertion, and in the Constitutions themselves it is common, in immediate connection with the assertion of the rights of private opinions and conscience, to find positive theological affirmations which discriminate in favor of the opinions of one portion of the citizens as against those of another. In some of the recently organized States, freedom of conscience was better guarded, in form as well as in substance; but in most of the States, while it was



meant to secure the equal rights of opinions and conscience, there were sections of the Constitution and laws that discriminated unfairly against the rights of some classes of citizens. These laws had, in many cases, been outgrown by public opinion and were not enforced; but they were on the statute-books, and might be, and sometimes were, resuscitated in a way to work gross practical injustice. In regard to the condition of liberal thought, the committee observed that the reports were "favorable to attempts of some kind toward a more systematic organization of the liberal sentiment of the country, without, however, indicating the method for effecting this. In a few of the States the conditions are represented as thoroughly ripe for an organizing movement, and all that is wanted is a few leaders, to point the way and rally the people, who are all ready to supply the material of the new societies. The States where the conditions are reported as most ready for organization are, in the East, Maine, Massachusetts, and the western portion of New York; and in the West, Michigan and Kansas. In the two latter States there appears to be a special receptivity to religious ideas, and a good deal of activity is already awakened in the direction of religious organization; in Michigan, largely under the auspices of a very liberal form of Unitarianism, and in Kansas under an association recently formed, called the Liberal Union, which is an attempt to solve the problem of uniting in local work and fellowship all the different phases of liberalism."

FRIENDS. The reports of numbers in the Society of Friends continue to show an increase of members in some of the yearly meetings, and a decrease in others, and, as a whole, indicate only a moderate growth. In the New England Yearly Meeting the accessions by twenty-nine births and the reception of fifty-three new members were nearly balanced by eighty-three deaths. The reports of the Indiana Yearly Meeting, on the other hand, indicate a very rapid growth in numbers. In England the society has appeared to be declining for the past twenty years, except in London, where an increase of about one thousand members has taken place during that time.

The New England Yearly Meeting met at Newport, R. I., in June. The whole number of members was returned at four thousand. The slow increase by births was accounted for in part by stating that as many as half of the members married persons who were not in the society, and the births from such marriages were not reported. A Friend, in speaking on this subject, said that his desire had been for many years that the persons thus married would ask the assistance of the Friends for their children. He thought the difficulties in the way of receiving converts into the Church ought to be removed. Now, when at any meeting converts came forward, they could not be received into the society till after a delay for presen-

tation to the next annual meeting. Another Friend thought that the old method should give way to evangelizing processes. The Friends in Indiana held a series of revival services during the winter, which continued for upward of a month, and resulted in the conversion of a considerable number of persons. The "Friends' Review," in speaking of these and other similar meetings, says that the results of the revival meetings in other churches had been scrutinized for years; and that, in the desire to revive the evangelizing power that characterized the apostles, it was thought best to institute revival services, and endeavor to teach the converts that they would stand firm when the warm influences of the meetings were withdrawn.

The subject of evangelistic or mission work was also discussed with much pains at the London Yearly Meeting. The matter was introduced in the consideration of the results of a conference on home-mission work and First-day schools, which had been held in November, 1881. It was shown at the conference that there were all over the country small, declining meetings, or closed meeting-houses; but that where adult or ordinary Sunday-schools had been established, evangelistic work had followed, the neglected classes had been attracted, and various classes had joined the society. In one case the membership of a meeting had been doubled in a few years. The conference had decided that the work of extending mission operations belongs to the Church, rather than to individual laborers or voluntary associations, and asked the yearly meeting to take upon itself the responsibility of doing it. It was also the judgment of the conference that some kind of missionary effort was really needed besides the purely voluntary labors of those who could afford to give their time to such work, and that when Friends could be found having a gift for the ministry, and willing to give up their time to the work, some provision should be made for their maintenance. The last recommendation excited much discussion in the yearly meeting. All the Friends expressed active sympathy with the mission-work; but some feared to see the society taking the responsibility for practices which were not quite in accord with its usual customs, and the idea of making provision for ministers, or for persons doing any religious work, was strongly objected to by many. Seeing how easily "making provision" might slide into payment for preaching, and depreciate the ancient testimony of the society, that the ministry is a gift of God, freely received and to be freely given, other persons viewed the proposition as a very grave one. The Women's Yearly Meeting, to whom the subject was referred separately, approved the appointment of a committee to carry out the recommendations of the conference. The Men's Meeting, after considerable discussion, agreed to a proposition to appoint a committee for one year, with a charge

carefully to guard against depreciating any of the society's testimonies, and with provisions for keeping the whole matter, in case any difficulties should arise, under the control of the yearly meeting.

The Associated Committee of Friends in the United States on Indian Affairs reported to the New England Yearly Meeting concerning its work among the ten thousand Indians of whom it has the supervision, that flourishing First-day schools and monthly meetings were maintained, with six boarding-schools, which were attended by seven hundred pupils. Several native Indians were preaching, among whom was Steamboat Frank, once a famous Modoc warrior. More than half of the ninety-six remaining members of the Modoc tribe had been converted from wild savages to quiet, peaceful Quakers. One hundred and forty-three conversions were reported.

The London Yearly Meeting met May 22d. The whole number of members was reported to be 15,113, including 435 scattered about in for-

eign countries, and showed an increase of 188 during the year. The number of regular attendants on worship not in membership was given at 5,084, showing an increase of 43. The First-day schools included 1,400 scholars. The Tract Society has issued from London 127,884 tracts, including 12,641 in foreign languages, and from Leominster 442,917 tracts. At the Foreign Missionary Meeting accounts were given of the progress of missionary work in Madagascar, Syria, and India. Agents of the society have also done missionary and evangelistic work in South Africa, Australia, and New Zealand. Meetings were held, during the sessions of the yearly meeting, of the Friends' Temperance Union, which had secured the delivery during the year of scientific temperance lectures in the public schools of the Friends and of the Friends' Good Templars; and a meeting was held to consider what Friends could do toward abating the prejudice in the United States against the negroes.

## G

**GAMBETTA, LEON MICHEL.** (See *OBITUARIES AND ANNUAL CYCLOPEDIA* for 1881.)

**GARIBALDI, GIUSEPPE**, the leader of Italian independence, died at his home, on the Island of Caprera, June 2d. He was born July 22, 1807, at Nice, before it was incorporated in the French dominions. His family was of pure Lombard stock, bearing an old Lombard name which is common in Northern Italy. His father and his grandfather were seamen. His father had come from Chiavari, in the Riviera di Levante. His mother, Rosa Ragiundo, was a woman of fine, religious nature, to whose teachings he ascribed his patriotic feelings. His education was confined to irregular lessons from religious instructors. He followed the sea from his earliest youth, making many voyages to Constantinople, Odessa, Rome, and along the Mediterranean coast, in his father's brig and other vessels. He was once taken ill at Constantinople, and found employment during his convalescence as a family tutor.

Subsequent to the revolutionary movement of 1831 he fell in with Mazzini at Marseilles, and entered heart and soul into the band of Young Italy. The scheme of an invasion of Italy by sea was given up after Mazzini's expulsion from Marseilles, in favor of an attempt to enter Savoy from Geneva. The complete failure of the Savoy expedition was attributed by Garibaldi to the treason of the Polish General Ramorino. The young Garibaldi himself had embarked on the frigate *Euridice*, with the object of stirring the crew to mutiny. He left the ship to engage in an unsuccessful plot to capture the barracks of the Carabinieri at Genoa. He made his way to Nice, and escaped thence to Marseilles.

An exile from home, he picked up a precarious livelihood by giving instruction in navigation; then sailed on voyages to the Black Sea and Tunis, and finally entered into the service of the Bey of Tunis, as an officer on one of his ships. The sailors were so unmanageable that he threw up the engagement, and embarked (in 1836) on the *Nageur* for Rio Janeiro. In South America he at first engaged in his old business of coast-trading; but on the revolt of the province of Rio Grande do Sul, and the proclamation of a republic, he transformed his little schooner into a privateer, which he called the *Mazzini*.

The twelve years' career of Garibaldi in South America forms the most romantic tale of adventure and heroism of modern times. The extremes of good and ill fortune which he went through, his wonderful resources in extricating himself from desperate perils and winning victories against fearful odds, his magnetic power of chaining to him the hearts of his followers, and inspiring them with a daring equal to his own, were crowned with epic grandeur by his disinterestedness, his humane tenderness, his generosity, his courage in doing right, without regard to consequences. His services for the abortive Republic of Rio Grande were inaugurated by a brilliant success; then followed by a gloomy disaster. With his crew of twelve men he cut out an armed Brazilian vessel; but sailing into the (as he supposed) friendly port of Montevideo, his prize was taken from him, and he was cast into a dungeon and tortured. By the intervention of the Governor of Guleaguay he was released from his tormentor. Escaping across the territory of La Plata into Rio Grande, he fought with

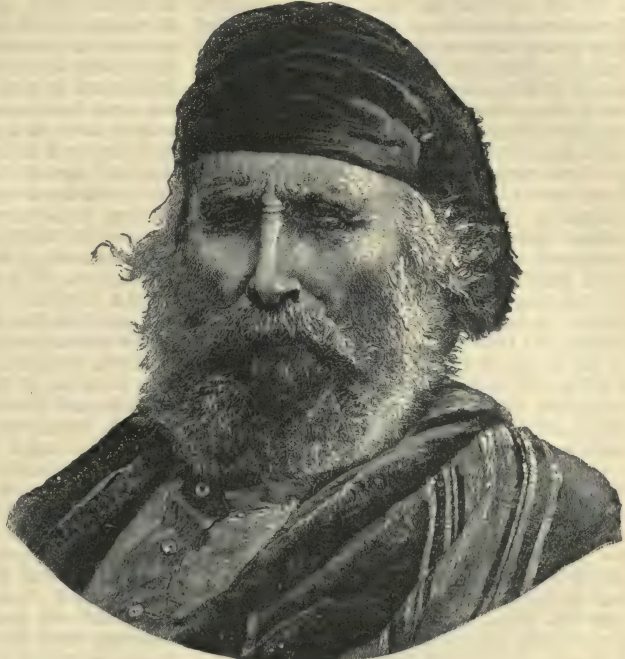


better success, taking fortresses by storm and beating squadrons, until misfortune again overtook him. While going to the support of the inhabitants of the Island of Santa Caterina, who were about to take part in the revolution, his ship went to pieces on a rock off the coast. Half of his crew were drowned. Not one of his seven devoted Italian comrades was saved. On this island the shipwrecked commander met the Brazilian woman, Anita, who, through all the storms and perils of his subsequent career, was ever at his side, until she succumbed to the hardships and privations which she bore like a soldier. Taking command of one of three new vessels built for the republic, Garibaldi began a new series of daring exploits. The fortunes of the republic waned at the time when Garibaldi's oldest son, Menotti, was born, on September 16, 1840. After the disastrous retreat of Las Antas, on which he was accompanied by Anita, carrying her newborn babe, Garibaldi lost heart in the ill-conducted war, and retired from the service of the Republic of Rio Grande.

He settled in Montevideo as a general broker and a teacher of mathematics. War soon broke out between the Republic of Uruguay and Buenos Ayres. Garibaldi was solicited to take a command by the Uruguay Government. He had envious rivals, however, who plotted to have him assassinated, with his friend Anzani. Through their machinations he was given a small squadron on the Parana, which was annihilated, as was intended, by a superior Argentine force. Escaping, with everything lost but honor, Garibaldi, in the darkest hour of the republic, organized his famous Italian Legion, whose blood has sprinkled a hundred battlefields in both hemispheres. The band of four hundred legionaries immediately won distinction. Garibaldi was able to announce to the Government that the victories of Boyada and San Antonio were due to their valor. They refused grants of land after the war, and were given the place of honor in every review.

In 1847, when the Pope was expected to head the cause of the deliverance of Italy from Austrian dominion, Garibaldi offered the services of his legion to Pius IX. On the 15th of April, 1848, he landed in Italy with his lieutenant Anzani, who died after landing, and

eighty-five men, leaving the rest of his guard to follow as soon as they could. The Austrians had been expelled from Milan, and the Venetians had declared their independence. Proceeding to the Sardinian King, Charles Albert, Garibaldi was coldly received. When, after the defeat at Custoza, Charles Albert accepted an armistice, abandoning Lombardy to the Aus-



GIUSEPPE GARIBALDI.

trians, Garibaldi cast his lot with Mazzini, and organized a force of five thousand volunteers, with which to engage in the "war of the people," who had been betrayed by their royal standard-bearer. The attempt to rally the people to the desperate cause was unsuccessful, and after a few skirmishes about Lake Maggiore, Garibaldi, with the remnant of his band, numbering three hundred, and in broken health, withdrew to Lugano, in Switzerland.

A few months later he was enlisted in another cause. The Romans had caused the Pope to flee, and proclaimed a republic, with Mazzini at the head. When the French troops came to re-establish the authority of the Pontiff, Garibaldi found plenty of Italians ready to engage with him in defending the national soil from the foreign invaders. He drove the French from Porta Pancrazio, April 29 and 30, 1849, and defeated the Neapolitans in the Velletri campaign. Then, in the terrible siege of Rome, many of his bravest soldiers lost their lives, and he was obliged to abandon the city to the

French on July 13, 1849. New volunteers gathered around his standard as he retired by way of Terni and Orvieto. With a force of 2,000 men he crossed the Apennines. Pressed by the Austrians in overwhelming numbers, he evaded them at San Marino, and embarked for the relief of the Venetians, who were still withstanding the Austrian siege. Intercepted by Austrian men-of-war, he was compelled to put back and land near Ravenna. In the disastrous flight through the forest, Anita broke down and died in the arms of Garibaldi. His companions, Ugo Bassi and Ciceruacchio, fell into the hands of the Austrians, who shot them without a trial. Garibaldi made his way over to the Mediterranean coast, and, broken with grief, gave himself up as a prisoner to Sardinian Carabinieri. When the hero was taken before General La Marmora he met with fraternal sympathy. The General and the Liberal party shamed the Government out of their harsh treatment of the patriot. He was given a small pension and permitted to depart for Tunis, whence, finding no refuge there nor elsewhere, he departed for New York. Until he returned in 1854 to play his part in the last act of the drama of Italian independence, he kept a little workshop on Staten Island, where he supported himself as a tallow-chandler for a couple of years, and then went to Lima, and made a voyage to China.

On his return to Italy, Garibaldi was honorably received by the Piedmontese Government, and held aloof from the Mazzinian revolutionists. He remained in his peaceful retreat on the rocky islet of Caprera, near the Sardinian shore, until the war of Piedmont and France against Austria in 1859. Garibaldi took command of the Alpine Chasseurs. He defeated the Austrians at Varese and San Fermo, bewildering the hostile commander, Urban, by the rapidity of his movements, and advancing the line of the allies in the mountains as it advanced below by the victories of Palestro, Magenta, and Solferino.

After the war, Garibaldi set about organizing the expedition of the Thousand, with which, secretly encouraged by the Government, he was to accomplish the union of North and South Italy. Embarking at Genoa on the 11th of May, 1860, he landed at Marsala, beat the Neapolitan troops at Calatafimi, and marched upon Palermo, where the Palermians rose and aided in reducing the garrison. He routed the Bourbon troops also at Milazzo. All Sicily was soon in his power, except the citadel at Messina. Crossing into Calabria, he drove the King's troops before him, entering Naples on the 7th of September, 1860. The Piedmontese now hastened to reap the success which he had prepared for them. The royal troops crossed the Marches, beat Lamoricière and the Papal troops at Castel Fidardo, crossed the Neapolitan frontier, and reduced the fortresses of Capua and Gaeta. Through their co-operation, Garibaldi was able to deliver the

two kingdoms of Sicily into the hands of Victor Emanuel. Then, declining all proffered honors and emoluments, he withdrew to his farm at Caprera.

Garibaldi felt constrained to take part in parliamentary life to secure for his officers the rank which he had conferred upon them, and to discuss the question of ceding his native city, Nice, to France. Ratazzi encouraged him to undertake an unfortunate expedition for the expulsion of the Austrians from Venice. He engaged in the still more foolhardy enterprise of rescuing Rome from the French, which was suppressed by the Minister Ratazzi, who sent the royal forces against him. He was wounded and captured at Aspromonte, August 29, 1862, and sent back to Caprera. In 1866, during the Austro-Prussian War, Venice was finally delivered from the Austrian yoke; but Garibaldi's attempt to advance into Tyrol at the head of an army of volunteers was a failure. Beaten, wounded, and ill, he returned to his hermitage in Caprera. When Ratazzi, whose treatment of the Garibaldi expedition at Aspromonte had cost him his place, again returned to power, he secretly set on foot another Roman expedition. Garibaldi and his son Menotti entered into the plans of the minister; but at Montebello and Mentana the Papal troops, with French auxiliaries which landed under De Failly, November 3, 1867, routed the patriot bands. Three years later, after the fall of Napoleon, the French garrison left Rome without the aid of Garibaldi. He joined Gambetta at Tours, on the 9th of October, 1870, to rescue the French Republic. He was beaten by the German General Werder at Montbard, and was outgeneraled at Dijon. After the war was over, Garibaldi received nothing but insult and contempt from the reactionist party which was in the ascendant at Versailles, in return for his devotion to the cause of the country for which he had fought twice at Rome.

Garibaldi took his place in the political councils of Italy to the last years of his life. But the practical statesmen of Italy sought only to use him as a tool to work out their schemes of national aggrandizement. With his democratic principles and dreams of a happier condition of society they had no sympathy, and treated him as an idle visionary.

**GEOGRAPHICAL PROGRESS AND DISCOVERY.** The attention of explorers in 1882 was principally directed to the frozen regions of the Arctic Zone, to the interior of Africa, and to the unexplored parts of Asia. The latest expeditions to the polar regions have met with failure and disaster. The physical features of the interior of Africa are now known, with the exception of one or two geographical problems to be solved. It is also known through the journeys of Cameron and Stanley, and their successors, who have penetrated to the center of the continent and traversed it from side to side in various directions, that the inner parts of Africa are re-



gions of great productiveness and commercial promise. The problem has changed from the exploration to the commercial development of Africa, as in Asia.

**THE OCEANS.**—In recent hydrographical surveys contiguous areas with very different bottom temperatures have been found in various places. In every case the bottom layer in both of the adjoining areas commences at the same depth below the surface. The phenomenon has been ascribed to submerged ridges of land arresting the circulation of water between the two areas. In the Wyville Thomson expedition two such areas were found in the Faroe Channel. An elaborate theory was advanced of a wall of still water, separating the bodies of different temperature, formed by the impact of the Gulf Stream and the cold current from the Spitzbergen seas. During the Challenger's voyage the theory of submarine barriers was advanced. The submerged ridge in the Faroe Channel has been discovered by Murray and Commander Tizard. It rises up within 200 fathoms of the surface, which is precisely the depth at which the varying bottom temperatures begin, the surface layer above the crest of the ridge having the same temperature on each side. The ridge, which is named after Sir Wyville Thomson, rises 2,400 feet above the bottom of the ocean. It is supposed to be a glacial moraine.

**POLAR REGIONS.**—The ill-fated *Jeannette*, which set sail from San Francisco July 8, 1879, under the command of Lieutenant De Long, U. S. N., with the object of seeking an entrance to the supposed open Polar Sea by a northeast passage near Wrangel Land, passed into the Arctic Ocean on August 29th. The ship entered the ice within sight of Wrangel and Herald Islands, which ice jammed and shifted dangerously, causing the vessel to spring a leak on January 10, 1880. Caught in the pack, the vessel drifted to the northwest. Bear, seal, and walrus were shot occasionally. The ice was comparatively quiet during the summer, but in October it began to grind and pile. On May 16, 1881, land was seen to the westward. This unknown land was named *Jeannette Island*. On May 24th another island was in sight. It was called *Henrietta Island*. A party landed on this latter. It was from 2,000 to 2,500 feet high, barren and rocky, with one large and two smaller glaciers, and a covering of snow and ice on the high parts from 50 to 100 feet in thickness. Guillemots and murrelets nested in the cliffs in great numbers. The vegetation consisted only of lichens and mosses, with one species of *phanerogam*. On the 9th the ice opened and left the vessel afloat, and on the 12th it came together again and crushed her. She had been under pressure ever since she was first caught in the floe. The boats and the greater part of the stores and provisions were got out before the ship went down. There were some 24 dogs, which

could draw only the hospital-sled and a small one with extra stores. The retreat on the ice was directed toward the mouth of the Lena by way of the New Siberian or Liakhov Islands, which lay about midway in the course. The position of the *Jeannette* when she sank was about 600 miles from the Siberian coast, in a direct line. For twenty-one months the ship drifted helplessly with the pack, by the action of the winds and the currents. For the first five months after she was ice-locked off Herald Island the motion of the ice was cycloidal, the total result of the drift being only 45 miles. During the last six months the drift was very rapid to the northwestward. The soundings were 18 fathoms near Wrangel Land. The greatest depth was 80 fathoms,



LIEUTENANT GEORGE W. DE LONG.

the mean depth 35 fathoms. The *Jeannette* became imbedded in the ice immediately after entering the Arctic. No vessel could have withstood the strain to which she was constantly subjected for over eighteen months. In the latter part of the drift the sea was very shallow, 20 fathoms or under. The bottom was blue mud. Shrimps and numerous algae were brought up in the dredges. The surface temperature of the water was 20° above zero. The temperature of the air ranged from 58° below zero to 44° above. The mean temperature of the first winter was 30° below zero, of the first summer 40° above zero. Heavy gales were not frequent. The most violent showed a wind velocity of 50 miles an hour. The fluctuations of the barometer and of the thermometer were moderate. Disturbances of the needle coinciding with the auroras were observed. The winter's formation of ice was 8 feet thick. The

heaviest ice seen was 23 feet in thickness. During their retreat over the ice, a third island was seen, which was named Bennett Island. The positions of the three islands discovered were as follows: Jeannette Island, latitude  $76^{\circ} 47'$  north, longitude  $158^{\circ} 56'$  east; Henrietta Island, latitude  $77^{\circ} 8'$  north, longitude  $157^{\circ} 32'$  east; Bennett Island, latitude  $76^{\circ} 38'$  north, longitude  $148^{\circ} 20'$  east. The first was small, but the others of considerable extent. On Bennett Island, besides many birds, old deer-horns were found, and some lignite, with which Melville experimented. He found it suitable for steamers. Fossils and fine specimens of amethyst and opal were here collected by Dr. Ambler, but they were lost, as well as the

daily rations per man. There was a large quantity of alcohol, intended for fuel, and a good provision of Liebig's extract. They were well equipped with rifles and ammunition. The tents were just large enough for all to sleep in, and they were further sheltered with deerskin sleeping-bags. Some of the party were lead-poisoned from tin cans or otherwise disabled. The ice was very rough, and the floes were in motion. The men over-exerted themselves the first day, and had to rest for several days. Afterward they advanced about one mile a day. All hands were required for each sled, so that they were obliged to march thirteen miles for every mile of progress. At the end of the first week the captain found by observa-



ROUTE OF LIEUTENANT DE LONG AND THE JEANNETTE.

large collections of birds and deep-sea fauna made on the Jeannette. One result of the Jeannette Expedition is the establishment of the fact that the so-called *Polynias*, which arrested the sledge expeditions of Hedenström, Wrangel, and Anjou, are not permanent lanes produced by warm currents, but are simple openings such as have been observed in other parts of the frozen ocean.

On the 13th of June, 1881, the ship sank. Three days afterward, they started on their march southward over the ice, drawing five sleds packed with provisions, and three boats mounted on runners, a total weight of 15,400 pounds for a working force of twenty-two men. A pound of pemmican and four biscuits, with a little coffee, tea, and sugar, were the

tion that the drift of the ice to the northwest had been more rapid than their advance southward, and that they had really lost twenty-seven miles. They were in latitude  $77^{\circ} 42'$ , the highest latitude reached. They turned their course toward Bennett Island, which they sighted on July 12th, and on which they made a landing on the 27th. It was a rugged island of trap rock and a lava-like soil. It took a party two days to cross the island. The southern extremity, where they landed, was a promontory which they called Cape Emma. The tides were regular, with a rise of two or three feet. Millions of birds had their nests in the cliffs. On the eastern side were grassy valleys. They remained on Bennett Island a week. They discarded their sleds soon after leaving



the island, except the boat-sleds, which were necessary for the portages across the floes. They made sometimes ten miles a day in the boats, working between the floes, except when they had to haul their boats across. They were kept back ten days by the jamming of the ice, drifting on the pack along the north coast of Thaddens Island. They landed on the south shore of this island, which they found to be composed of mud-hills, which were wearing away rapidly, with mossy tundra in the interior. They sailed southward over the shoals between Thaddens and Kaltenoi Islands. On the latter, which is the largest of the New Siberian group, and lies northeast of the Lena mouth, they encamped on September 6th, and on Semmoffsky Island on the 10th, where they ate venison after many days of short rations. When they set out on the 12th, and were ranging along the coast, the wind blew up a gale. The first cutter, twenty feet four inches in length, and drawing twenty-eight inches, contained Captain De Long, Dr. Ambler, Mr. Collins, the meteorologist, Ninderman, Erickson, Gurtz, Noros, Dressler, Iverson, Kaach, Boyd, Machinist Lee, Ah Sam, and the Indian Alexei. The second cutter, sixteen feet three inches long, was hardly seaworthy. It contained First-Lieutenant Chipp, Ice-Pilot Dunbar, Carpenter Sweetman, Staar, Warren, Kuehne, Johnsen, and Sharwell. The whale-boat was twenty-five feet four inches long and stanchly built. Lieutenant Danenhower being disabled by ophthalmia, Engineer Melville took command. Besides these two it contained Boatswain Cole, Dr. Newcomb, the naturalist, Leach, Mansen, Wilson, Bartlett, Lauterbach, Steward, and the Indian Anequin. In the gale the boats became separated. Lieutenant Chipp's boat was lost. None of the party has been seen or heard from. The whale-boat reached one of the eastern mouths of the Lena delta on the 17th of September, 1881. The boats were within sixty miles of land when driven apart by the gale. The whale-boat sailed up the branch of the river to the Lena proper. Here three native fishermen were encountered. The Tungus took them out of the way to their village on Cape Bikoffsky. They saw there the chief and a Russian convict. These two were sent to the station of Bulun with dispatches. The Yakoot natives were not willing to guide the party to Bulun, as it was too late for navigation and too early for sledging. While they were waiting, Lieutenant Danenhower made an ineffectual search on the Lena delta for the missing boat-crews. The messenger was absent thirteen days. On his way back he fell in with two men from the cap-

tain's party who had been sent in search of assistance. Melville hastened forward to see these men, Ninderman and Noros, and to start out to find the captain and his party. After a short time he joined his party at Yakutsk, where he remained with Ninderman and Bartlett to make a thorough search in the spring, while Danenhower with the rest of the crew made his way homeward. Melville in his first search came to some of the huts where De Long had staid, and certain of the records were brought to him by natives; but he lost the track and gave up the search, being disabled from the effects of freezing in the whale-boat, and unable to induce the Tungus to carry him farther with their dog-teams; while it was already too late to succor the captain's party if they had not found other relief.



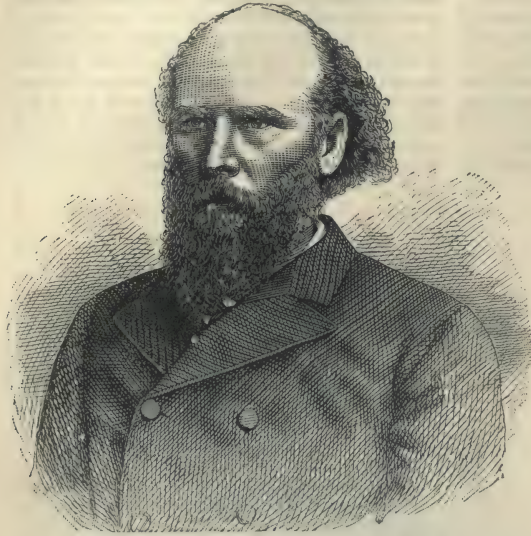
LIEUTENANT JOHN WILSON DANENHOWER, U. S. N.

While the whale-boat was driven by the gale of the night of September 12th far to the eastward, De Long sailed in a westerly direction along the shore, and made one of the western mouths of the Lena on the 16th. After trying for two days to make a landing in the boat, they left her on the shoals, and waded ashore with the arms, records, and provisions. They had only four days' rations on reduced allowance. On the 19th they set out for the south, leaving the log-books, ship's instruments, etc., at the beach. Three of the party were disabled by frost-bites, so that it took two days to march twelve miles. Here they found two huts in which they remained until the 24th, waiting for the disabled to recover from their lameness. Two reindeer were shot here. They reached another hut on the 28th, where they waited until the 1st of October for the river to freeze over. They found more game, but when they



advanced a few days farther in the tundra desert they had eaten their last meat, and prolonged their failing vitality on an allowance of three ounces of alcohol per man per day. Erickson, whose feet were frozen, died on the 7th. The captain chose Ninderman and Noros to advance by forced marches to Kumak Surka and seek succor from the natives. They set out on the 9th of October. In a starving con-

er, in which the year before he had reconnoitred a long stretch of unknown coast in Franz Josef Land, set out in June, 1881, to continue the explorations and incidentally to aid in the search for the Jeannette. As nothing was heard from Mr. Smith and his party from the time they disappeared in the north until August, 1882, they were almost given up for lost.



GEORGE M. MELVILLE, CHIEF ENGINEER, U. S. N.

dition they were found by a party of Tungus on the 19th in the huts at Bulkur, twenty-five miles north of Kumak Surka. After journeying one hundred and twenty miles without food they had only reached the locality where Captain De Long supposed, that he was when they started. The natives fed and tended the exhausted sailors, but either did not understand them or were unwilling to go with them to the relief of their shipmates. They were taken to Kumak Surka, where they saw the Russian exile who acted as Melville's messenger, and then to Bulun.

At the time when the Tungus rescued Noros and Ninderman from starvation in the huts of Bulkur, nearly all of their comrades had already breathed their last. De Long kept a journal to the last day of his life. On the 30th of October he and Dr. Ambler, with the Chinaman Ah Sam, were the only survivors, and on that day they also succumbed to their privations. In the spring Melville explored the delta thoroughly for traces of De Long's and Chipp's parties. At the end of March De Long and his eleven companions were found as corpses. They had consumed their boots and their skin-clothing to stay the pangs of hunger.

The Eira, Leigh Smith's stanch Arctic cruis-

The Eira was provisioned for a year, but not equipped for winter. The last seen of her was by a Norwegian walrus-hunter off the southwest coast of Nova Zembla. She was headed off by the ice-pack and was waiting for the ice to open. In the summer of 1882 a whaling-vessel, the Hope, was fitted out and sent in search of her, under the command of Sir Allen Young. After waiting for an opening in the ice several weeks, the Eira reached Franz Josef Land August 7th and steamed along the coast to within fifteen miles of Cape Ludlow, and then returned to Bell Island, having been headed off by the ice. Being unable to pass to the eastward of Barents Hook, they made fast to a land-floe off Cape Flora, where the vessel was nipped in the ice and sunk on August 21, 1881. A portion of the provisions were got out before she went down. Walrus and bear meat was obtained often enough to keep the officers and crew from starvation. A hut which they built of turf and stones sheltered them during the winter. On June 21, 1882, the twenty-five men started for Nova Zembla in four boats. They carried provisions which they had prepared, sufficient for two months. After sailing eighty miles, they were stopped by the ice. In six weeks water was reached again. A gale drove them on their way, and they landed at Matochin Straits within twenty-four hours. The William Barents was spoken the next morning, and from her they learned that the Hope was anchored in a neighboring bay. Sir Allen Young returned with the shipwrecked crew as soon as possible, reaching Aberdeen on the anniversary of the day when the Eira went down. In the cruise of the Eira in 1880 Leigh Smith reached Franz Josef Land at the small island called May Island to the west of Cape Tegethoff and south of Hooker Island. He passed in a southwesterly course around Barents Cape and discovered a new land which he named Northbrook Island, and its extremity Cape Flora. Beyond here he found a haven between Bell and Mabel Islands, which was named Eira Harbor. From here he passed around Cape Grant and followed the coast of the mainland as far as a point which was called Cape Neale, where he was stopped by the ice-pack. He could see from here the land for a long distance trend-



ing to the northwest. His intention the following season was to carry his explorations beyond the point reached in 1880. The ease with which the crew of the *Eira* crossed over to Nova Zembla in open boats confirms the belief held by many that in many years steamers could find a route in the autumn across the Barents Sea.

None of the Arctic voyages of 1882 was successful. The Dutch exploring vessel *William Barents* was unable to enter Kara Sea on account of the ice. Sir G. Gore-Booth was not more fortunate in the Kara. Trading-vessels bound for the Yenisei were obliged to turn back. Captain Hovgaard, who was bound for Cape Tcheliusk, in the *Dymphna*, was ice-bound near Waigat Island. The *Varna*, while carrying a party of Dutch meteorologists to establish an international station at Dickson's Harbor on the Yenisei, was caught in the pack in the same place.

Captain Weyprecht's scheme of establishing permanent meteorological stations for taking simultaneous observations of atmospheric and magnetic phenomena at many different points around the pole has been carried out at last. There are about 200 observers, sent by the leading governments of the world, in 15 principal and 24 subsidiary stations, who will continue their observations until the end of August, 1883. Upon their return they will all meet in London to compare their records and exchange views. The 15 main stations are as follow: two Russian, one on the Lena delta and one at Karmankuli Bay, in Nova Zembla; one Dutch, at Dickson Harbor; two Norwegian, one at Sodan Kylar, in Finland, and one at Bossekop, in Lapland; one Austrian, on Jan Mayen; one Swedish, at Cape Thorsden, in Spitzbergen; one Danish, at Godthaab, in Greenland; one German, at Cumberland Sound; two American, one in Lady Franklin Bay and one at Point Barrow; one British and Canadian, on the Great Slave Lake; one French, at Cape Horn; one German, in South Georgia; and one Italian, at Villa Colon, near Montevideo. The establishment of the two latter is the commencement of investigations around the south pole.

The German international meteorological station at Cumberland Sound was established in August, at Kingawa Fjord, in  $66^{\circ} 37'$  north latitude, and  $87^{\circ} 15'$  west longitude. The observers remain one year. They encountered an unusual amount of ice in Davis Straits and made their way through the sound with difficulty. The British charts were found to be worthless, nearly all the positions being wrong, the latitudes nearly a degree out of the way. Dr. Wilhelm Giese, of the Berlin Observatory, is the chief, with Dr. Leopold Ambrun as assistant meteorologist; two physicians conduct naturalistic researches. The Austrian international expedition to Jan Mayen, recruited from the navy, and commanded by Lieutenant Wohlgemuth, was unable to approach the island at

the end of May; but, returning in June, they reached Jan Mayen on the north side, and, after being retarded a fortnight by the shore-ice, anchored in Mary Muss Bay, and landed in the middle of July. The observatory was erected in  $71^{\circ}$  north latitude, and  $8^{\circ} 26'$  west longitude. Exploring the Beerenberg volcano to the edge of the crater, 5,000 feet above the sea, they perceived subterranean rumblings and saw sulphurous smoke issuing from crevices in the sides of the mountain.

ASIA.—The Russian commission which has been studying the problem of turning the Amu Darya into its old channel and making it flow into the Caspian instead of the Sea of Aral, have given up the task in despair. There is no doubt that the Uzboi was the ancient channel of the Oxus; but to deflect the river into its old bed would be to turn it into the old lake-basin of Sara Kamysh, which is greater in extent than the Aral Sea, and where the evaporation is so great that the Oxus could never fill it again. The Russian engineer Lessar asserts that there exist other lake-basins of the same kind, and that Serakhs and other places, visited by him in 1881-'82, lie considerably below the level of the Caspian Sea.

AFRICA.—The French have displayed a feverish activity in Africa, as well as in Asia and other fields, for trade and colonization. One of the schemes which they have pursued with the greatest eagerness has been the commercial development of their possessions in Senegambia and the extension of French influence and commerce in the interior. The trans-Sahara Railway, with which it was expected to tap Timbuctoo and the Soodan, has been given up, and the scheme of conducting the Mediterranean waters through an artificial channel into the salt basins of Algeria has been abandoned. The only scheme which rivals the Senegambian project is De Brazza's for tapping the trade of equatorial Africa. In Northwest Africa, as everywhere, the French have rivals in the English, in whose colony at the mouth of the Senegal is the natural outlet for the trade of the interior. France has been strengthening her political position in these regions for several years. In 1881 Captain Gallieni induced King Ahmadu, of Sego, on the Niger, to place himself under French protection. Kita, a place which lies half-way between the Niger and the Senegal, has been occupied by the French military. An expedition set out late in 1882, under Colonel Borgnis-Desbordes, to construct a fort at Bamaku, and launch a fleet of steamboats on the Niger. Another expedition, of engineers and workmen, departed to build a railway between the Niger and the head of navigation on the Senegal.

The emulation of explorers in equatorial Africa has given place to the bitter feelings of national and commercial rivalry since the resources of the vast elevated interior have become known. The two distinguished explorers, Stanley and De Brazza, have both devoted



their energies to establishing a commercial route from the coast into the productive and healthful interior. Stanley was first in the field. With abundant means furnished by the King of the Belgians, he, at great cost and with great difficulty, constructed a road, fifteen feet wide and solidly laid to withstand the torrents which descend the mountain-sides in the rainy season, from below the cataracts along the north bank of the river to the upper navigable waters above Stanley Pool. The length of this costly artificial route is 230 miles. He commenced the work in August, 1879, with a force of fifteen Europeans, sixty-eight Zanzibaris, and a number of Kabindas, besides the natives whom he engaged in the districts through which the road passed. The engineering tools and machinery were brought from Europe in an English steamer and a barge towed by their own steamer, *La Belgique*, of thirty tons burden. They were provided besides with four steam-launches and five other launches. Stanley gave substantial consideration to the five chiefs of Vivi for the right to build the road through their territories. He leveled the summit of a rocky hill upon which to erect the first station. By December, 1880, the turnpike and bridges had been built as far as the second station, at Isangila, fifty-two miles from Vivi. Beyond was a mountain around which the road had to be carried by excavations and stone embankments. Beyond the mountain the road leads through a dense forest, in which the tall trees which they felled were piled on each side, and the roots dug out with much labor. The third station, Manyanga, was reached in May, 1881. The river is navigable between the two stations. Stanley fell ill at this stage of the work. When recovered he pushed forward to select a site for the fourth station on Stanley Pool. He had been obliged to pay a dear price for every privilege, and was prepared to offer high ground-rent for the site, but here he encountered unexpected difficulties. De Brazza had preceded him and bespoken the spot which he chose for the fourth station on the north bank of the river. It came almost to a bloody conflict between Stanley and the people at Mfiva, where De Brazza had acquired a cession of land on which to found the future French station of Brazzaville. A friendly chief intervened and offered Stanley another site on the opposite shore, where he erected the station of Leopoldville. In December, 1881, he launched a steam-yacht and boat on the Congo above the last of the Livingstone Falls. The site for a fifth station was selected at the confluence of the Coango with the Congo, about one hundred miles above Leopoldville. The soil is reported by Stanley to be of inexhaustible fertility and suited to all kinds of crops. The supply of caoutchouc in the forests is sufficient for the world's demand. The principal difficulty in the utilization of the river throughout its navigable length he considers to be the cannibal tribes beyond the farthest point

reached, and Nyanginé, with whom he had many collisions in his original exploration of the Congo. Before returning to Europe, Stanley made a voyage of discovery in the steam-launch for four hundred miles above Stanley Pool. He steamed up a new river, entering the Congo from the south some distance above Stanley Pool. It led into a fine lake, which was covered with fishing-canoes.

French explorers have usually chosen the Ogové River as the route of their expeditions in Central Africa. Its delta is only forty miles south from the Gaboon, on which there is a French colony. One of the more energetic and successful of the explorers of the Ogové is Savorgnan de Brazza, an Italian, who holds a commission in the French Navy. In 1880 he discovered that a tributary of the Congo, the Alima, rises close to the upper course of the Ogové. He descended the Alima to the Congo. Between the navigable waters of the Ogové and of the Alima there are passable natural roads, and a railroad could be built over the short stretch at less expense than Stanley's wagon-road around the cataracts of the Congo. He unfolded a remarkable skill in African diplomacy in his efforts to forestall Stanley and obtain for his country a priority in the commerce of the Congo. On the upper Ogové he established a French station, Franceville. On the Congo he obtained the cession of a strip of territory fronting for nine miles on the Congo at Stanley Pool. A treaty was drawn and signed by the immediate chief of the territory and by all the chiefs of the Batekes and their head chief Makoko, who claims the sovereignty of all the region between the Lefini, or Lawson, and the Ncouna Rivers. They agreed to the grant, and accepted French flags in token of the protection of the French Republic, according to De Brazza's construction of the arrangement. The documents were signed on September 10 and October 3, 1880. De Brazza then descended the Congo to where Stanley was engaged in his toilsome task near the second station, at Isangila. In a second journey, concluded in the summer of 1882, De Brazza explored the country north and south of Franceville, seeking some more favorable water-route by which the commerce of the Congo could be diverted. He explored the plateau between the source of the Ogové and the coast. He found it to be extremely fertile, and rich in copper and lead. He found also another promising water-route, the Niari River, which discharges only sixty miles north of the mouth of the Congo. The chiefs between the Ogové and the Congo seem to look favorably thus far on the development of a French protectorate. The rough methods of Stanley are the cause of his being more feared than liked in the region of the Congo. Since the return of De Brazza, Dr. Ballay has departed for the upper Ogové. Mizon, the head of the station at Franceville, has explored the plateau between the Alima and the Ogové several



times, examining all the water-courses with a view to the discovery of navigable ways, and cementing the good understanding with the natives. The French Government felt at first a cautious reluctance to embrace De Brazza's scheme for the establishment of French primacy on the Congo, but on the 30th of November, 1882, pursuant to a law of the Chambers, the treaty with Makoko and his vassal chiefs was ratified. The Portuguese, who claim the sovereignty over the mouth of the Congo and the interior, raised a protest, although their rights in this region are merely nominal. De Brazza and his coadjutors look to the extension of French dominion from the Gaboon over the valley of the Ogové and thence to the middle course of the Congo.

AMERICA.—The researches of Charnay in Central America prove that the Toltecs and Mayas stood in a high stage of civilization at the period immediately preceding the coming of the Spaniards, but that this civilization was then of very recent development. The ruins of a large city, probably that referred to by Stephens as the "Phantom City," were discovered in Guatemala on the Usumacinta. The city to which Charnay gave the name of Lorrillard City consists of a multitude of palaces, temples, and houses which resemble those of Palenque, which it resembles also in being built upon terraces cut out of natural hills. The hieroglyphics are as elaborate as those of Palenque and Comalcalco, and the bas-reliefs even finer. The houses are of varying and irregular construction, as at Palenque. The great temple stands on the summit of a pyramid 120 feet high. The frieze is ornamented with human figures. On the decorative coping once stood a colossal statue. Beside the temple is a large palace, and behind it a great pyramid on which stood six palaces.

GEORGIA. Governor, Alexander Hamilton Stephens; Secretary of State, N. C. Barnett; Treasurer, D. N. Speer; Comptroller-General, W. A. Wright; State School Commissioner, G. J. Orr; Attorney-General, Clifford Anderson; Commissioner of Agriculture, J. T. Henderson; Railroad Commissioners, James M. Smith, Campbell Wallace, L. N. Trammell; Principal Keeper of the Penitentiary, J. W. Nelms. United States Senators, Hon. Joseph E. Brown, Hon. Pope Barrow (till March 4, 1883), Hon. Alfred Holt Colquitt (after March 4th). Members of Congress, J. O. Nichols, First District; H. G. Turner, Second District; Charles F. Crisp, Third District; Hugh Buchanan, Fourth District; N. J. Hammond, Fifth District; James H. Blount, Sixth District; J. O. Clements, Seventh District; Seaborn Reese, Eighth District; Allen D. Candler, Ninth District; Thomas Hardeman, at large.

FINANCIAL STATEMENT.—The report of the Treasurer for the fiscal year from October 1, 1881, to September 30, 1882, shows that the total amount received in the Treasury for the above period was \$2,403,976.61, and that the

disbursements were \$1,713,507.48, leaving a balance in the Treasury, October 1, 1882, of \$690,472.15, in which are included \$275,000 in bonds of the State of Georgia (\$115,000) and in United States registered bonds (\$160,000) paid by the purchasers of the Macon and Brunswick Railroad, and the suspended balances due from the Citizens' Bank of Atlanta (\$83,218.51) and from the Bank of Rome (\$22,206.42). Deducting this unavailable amount, \$380,424.74, from the stated balance of \$690,472.15, and the actual cash balance on October 1, 1882, is \$310,047.41. The public debt of the State is \$9,624,135, the annual interest on which amounts to \$645,440. Of this debt, \$100,000 mature in 1883; \$100,000 in 1884; \$175,635 in 1885; \$4,000,000 in 1886; \$2,098,000 in 1890; \$307,500 in 1892; \$542,000 in 1896; \$2,298,000 in 1898; and \$3,000 in 1932. The greater portion of this sum bears seven per cent interest. In addition to this bonded debt, the State is liable absolutely and contingently as indorser on bonds of the South Georgia and Florida Railroad amounting to \$464,000, and on bonds of the Northeastern Railroad amounting to \$260,000.

The property owned and possessed by the State consists of the Western and Atlantic Railroad, 138 miles, leased at an annual rental of \$300,000, the lease having nine years to run; Macon and Brunswick Railroad, 195 miles, sold for \$1,125,000, of which \$625,000 are yet due; bonds of the Marietta and North Georgia Railroad, \$66,233.62; 186 shares of the Georgia Railroad and Banking Company, \$25,000; and 440 shares of the Southern and Atlantic Telegraph, guaranteed by the Western Union Telegraph Company, \$10,000. The value of the public buildings owned by the State is not estimated. The estimated receipts at the Treasury for the year ending December 31, 1883, is \$1,350,000, and the estimated disbursements for the same period \$1,361,317.14. No State in the Union is in a sounder financial condition, or has a higher standing in the money markets of the world. In 1877 the public debt was \$11,044,000, with an annual interest of \$800,000. In 1876 the State had a floating debt of \$256,000, all of which has been extinguished. For several years the State has not borrowed a dollar to meet the expenses of her government, but, on the contrary, she has been able to pay off nearly \$1,500,000 of her debt, and reduce her annual interest account \$150,000. In addition to this, she has covered in the Treasury nearly \$250,000 from the collection of outstanding debts long due to her. At the close of 1881 the market for Georgia stocks and bonds was brisk at very high figures, from seven to ten points above the previous year. But, mainly owing to the short cotton crop, the year 1882 closed with lower prices. The following quotations of South Georgia, city of Savannah, and some railroad mortgage bonds and stocks, will illustrate the decline:

STOCKS AND BONDS.	1881.		1882.	
	Bid.	Asked.	Bid.	Asked.
South Georgia 6 per cent bonds, due 1889.....	111½	112	106	107
South Georgia 7 per cent bonds, maturing 1886.....	111	111½	105	106
South Georgia 7 per cent bonds, due 1896.....	124	125	122	123
City of Savannah 5 per cent bonds.....	88	88½	88½	84½
Central Railroad 7 per cent mortgage bonds.....	119	120	111½	112½
Georgia Railroad 6 per cent bonds.....	107½	108½	105	106
Montgomery and Eufaula Railroad 6 per cent indorsed bonds.....	107	108	104	105
Western Railroad 5 per cent second-mortgage indorsed bonds.....	120	121	118	118½
Georgia Railroad stocks.....	174	175	155	157
Central Railroad stocks.....	122½	123	97½	98½
Augusta and Savannah stocks.....	123	124	118	119
Southwestern Railroad stocks.....	121	123	116	117

The above prices are not nominal, as buyers are more eager to purchase than holders to sell at these figures.

PROPERTY, TAXATION, ETC.—The report of the Comptroller-General presents a very encouraging exhibit of the material condition of the State. The property of Georgia, as returned for taxation for the year 1882, shows an increase of \$16,255,150; the whole amount of taxable property being returned at \$287,249,403. The increase for 1881 was \$18,977,-

611, making the total growth of wealth for the two years \$35,232,761, yielding, at the existing rate of taxation (three mills on the dollar), additional revenue to the amount of \$105,698.

The following table shows in a consolidated form the aggregate value of the whole property in Georgia returned for taxation for the years 1881 and 1882; showing the increase and decrease in values of each kind of property, and the total increase for 1882:

DESCRIPTION OF PROPERTY.	Value, 1881.	Value, 1882.	Increase.	Decrease.
Improved lands.....	\$90,597,519	\$94,462,914	\$3,865,395	.....
Wild lands.....	1,886,915	2,373,827	586,912	.....
City and town property.....	55,622,501	60,458,957	4,831,156	.....
Building and loan associations (capital).....	256,110	308,496	52,386	.....
Bank-shares (value).....	4,518,637	9,399,086	.....	\$479,551
Money and solvent debts.....	32,043,086	33,608,058	1,564,972	.....
Merchandise.....	15,662,547	16,091,125	428,578	.....
Capital in shipping.....	201,199	172,201	.....	28,998
Stocks and bonds (value).....	5,287,021	6,262,405	965,384	.....
Cotton-factories.....	2,482,086	3,543,881	1,061,795	.....
Iron-works.....	649,949	569,231	.....	219,282
Capital in mining.....	101,675	127,622	25,947	.....
Household furniture.....	9,988,209	10,157,645	174,436	.....
Watches, jewelry, plate.....	1,168,469	1,188,327	19,858	.....
Horses, mules, hogs, etc.....	23,638,294	23,514,937	.....	123,357
Plantation-tools, etc.....	8,474,208	8,577,632	103,420	.....
Cotton, corn, etc., April 1st.....	980,180	846,313	.....	\$13,867
Other property.....	5,107,859	5,940,759	832,900	.....
Defaulters' property (single).....	995,811	1,396,500	400,629	.....
Railroad property.....	16,741,258	18,729,427	1,988,169	.....
Totals.....	\$270,993,888	\$287,249,403	\$17,071,285	\$16,255,150
Total value of property, 1882.....				\$287,249,403
Total value of property, 1881.....				270,993,888
Increase in value for 1882.....				\$16,255,150

The number of polls returned by colored taxpayers for 1882 is 93,635, owning property, real and personal, of the aggregate value of

\$6,589,876. The relative wealth, real and personal, of the five most populous counties in the State is shown as follows:

COUNTIES.	Value, 1882.	Value, 1881.	Increase.	Decrease.
Fulton.....	\$24,592,287	\$22,989,750	\$1,652,507	.....
Chatham.....	20,961,788	17,580,590	2,781,198	.....
Richmond.....	17,989,050	16,604,091	1,384,959	.....
Bibb.....	9,554,007	9,043,313	510,694	.....
Muscogee.....	8,705,054	8,108,719	596,335	.....

The amount of fire insurance for the year ending April 30, 1882, was \$118,048,367.05, the premiums on which amounted to \$1,107,363.34, an average rate of less than one per cent. The losses amounted to \$991,329.86. The amount of life insurance for the same period was \$6,677,454, the premiums on which amounted to \$183,277.75. The losses were \$119,734.52.

The report of the Comptroller-General, as to

the increase of revenue and its assured permanence, induced the General Assembly, at its session in November and December, to reduce the rate of taxation from three to two and a half mills.

The decrease in the State tax during the past six years affords gratifying evidence of the growing prosperity of the Commonwealth. In that time the tax was reduced first from six mills



to five, then from five to three, and now from three to two and a half. This is the result of a steady increase in the value of property, and of a steady decrease in the expenditures and in the rate of interest. Ten years ago the State paid ten per cent; now she can easily float a loan, should she need it, at five per cent.

The purposes of the estimated disbursements for the ensuing year are as follows:

On account of civil establishment.....	\$87,050 00
contingent fund.....	10,000 00
printing fund.....	10,000 00
Academy for the Blind.....	12,000 00
Deaf and Dumb Asylum.....	15,000 00
Lunatic Asylum.....	100,000 00
University of Georgia.....	5,000 00
Atlanta University (colored).....	8,000 00
Department of Agriculture.....	10,000 00
public debt.....	745,440 00
expenses of Penitentiary.....	6,700 00
State chemist.....	3,000 00
inspectors of fertilizers.....	6,000 00
Railroad Commission.....	8,700 00
trustees of Asylum.....	1,500 00
salary school fund.....	270,000 00
land-scrip fund.....	6,314 14
Legislative pay-roll.....	42,618 00
Total.....	\$1,861,817 14

STATE INSTITUTIONS.—The University of Georgia, at Athens, Clarke County, including the State College of Agriculture and the Mechanic Arts, the Medical College at Augusta, and the branch preparatory colleges at Dahlonega, Milledgeville, Cuthbert, and Thomasville, shows a marked improvement as compared with previous years. The total number of students for the collegiate year ending July 19, 1882, was 1,108. In the current collegiate year this number will be largely increased; that already in attendance at Athens being one third larger than in the past year. The departments of the university are: 1. The Academic Department, known as Franklin College. 2. The State College Department—the State College of Agriculture and the Mechanic Arts. 3. The Law Department. 4. The Medical Department. The faculty of Franklin College consists of nine professors; that of the State College of Agriculture, etc., of eight professors; that of the Law Department, of six professors and lecturers; and that of the Medical Department, of eleven professors and demonstrators, with eleven clinical assistants. The university degrees are: 1. Master of Arts. 2. Civil Engineer. 3. Bachelor of law. 4. Doctor of Medicine. The Franklin College confers the degrees of Bachelor of Arts, Bachelor of Science, and Bachelor of Philosophy; and the State College of Agriculture, etc., confers the degrees of Bachelor of Agriculture, Bachelor of Chemical Science, and Bachelor of Engineering. The standard of scholarship for each degree is as high as that of any other university in the Union. By the action of the Board of Trustees two years ago, tuition was made free in Franklin College and in the State College of Agriculture. The chemical, physical, engineering, and agricultural apparatus is complete and of the newest make. The income of the university for the past year was \$49,213.30, and the expenditures were \$40,-

510.67. At the last commencement, July, 1882, Senator Joseph E. Brown, one of the trustees, proposed to donate to the university \$50,000, on condition that the State receive the sum in cash into the Treasury to be used in payment of the public debt, or in such other manner as may be for the best interests of the State, and will issue her bond or bonds to the university bearing seven per cent interest, payable semi-annually, the bonds to run for fifty years. The object of the donation was to establish a fund in the hands of the university, the interest of which (\$3,500) was to be loaned to young men of good character in Georgia, who desire to obtain a liberal education, but who lack, wholly or in part, the means necessary to pay for their board and clothing while engaged in the pursuit of their studies at the university. It was further conditioned that no young man should avail himself of the benefit of the fund until he was eighteen years of age; that each sign a pledge of honor, when he enters college, to refund the sum received as soon as he can do so after he completes his course of study; that he shall pledge himself that when twenty-one years of age he will give the university his legal obligation for the payment of the sum with four per cent per annum interest; and that not more than \$200 per annum shall be loaned to any student, to be advanced to him monthly during the scholastic year. It was also provided that, in case of a large number of applicants, the trustees should select the beneficiaries by competitive examination or otherwise; that the sums repaid by each student be added annually to the principal, and only the interest loaned in future, so as to increase the number of beneficiaries, and also to increase the principal sum, which in progress of time would grow to a large amount; that if in any year there should not be a sufficient number of applicants of good moral character and promise to consume the amount of interest accruing during the year, the unused interest should be added to the principal; and that young men studying for the ministry should only be required to refund half the amount borrowed. The fund was to be called the "Charles McDonald Brown Scholarship Fund," in memory of Senator Brown's son, Charles McDonald Brown, a noble Christian youth of fine intellect and high honor and integrity, who had been a student in the university, and died in the year 1881. The trustees gratefully accepted the donation on the proposed conditions, but the General Assembly refused to comply with the terms specified, on the ground that the State Constitution forbids any increase of the public debt of the State, except to repel invasion and to defend the State in time of war, and that the issue of the bonds would be a direct violation of the Constitution. Some of the ablest lawyers in the State hold a contrary opinion, but the legislative action deprives the poor and meritorious young men who desire to obtain a liberal education, but can not

do so from want of the necessary means, of a munificent provision for their benefit, unless Senator Brown thinks proper hereafter to modify the terms of his gift.

It is proposed, if the Legislature will vote the necessary means, to provide the technological department of the university which now gives instruction in the four practical arts of physics, chemistry, agriculture, and engineering, with a well-equipped workshop in which the object and use of tools in every kind of manufacture may be taught. Such an industrial school as is proposed, in connection with the educational advantages of the university, would be of great value to the number of young men whose necessities demand that their education shall be practical.

**THE LUNATIC ASYLUM.**—The reports of the trustees and superintendent of this institution represent considerable improvement in its management and administration, especially in the attention given to the mental and moral treatment of the patients. The number of these in the asylum on October 1, 1882 (the date of the latest report), is 979, against 906 the year before. Of these, 729 are white and 250 colored. The total number under treatment during the year has been 1,163. The trustees ask an appropriation for 1883 of \$160,000 to cover all expenses, calculating the maintenance of each patient per day at 35 cents, and including the repairs and improvements of the buildings. Several new buildings have been commenced during the year to provide adequate accommodation for the rapidly increasing number of lunatics and idiots, white and colored, among which is one new building of 500 rooms for the colored patients, which will be completed early in the spring of 1883. The cost of these additions, furniture, etc., will be \$89,254.82, making a total appropriation for 1883 of \$249,254.82.

**THE DEAF AND DUMB ASYLUM.**—The twenty-second report of the Trustees of the Institution for the Education of the Deaf and Dumb makes a satisfactory exhibit of its management. During fifteen months, to October, 1881, there were 64 pupils, all white, of whom 37 were males and 27 females. In the following year to October, 1882, there were 60 white pupils—males 35, females 25, and 20 colored pupils—males 12, females 8. The amount expended for the year 1881 was \$17,376.33, and for 1882, \$14,773.68. An appropriation of \$5,000 was made by the Legislature in 1881 for the erection of a school-building, but the trustees did not use it, because of its insufficiency to provide such a building as is needed. They have, therefore, asked an additional appropriation of \$15,000, and further sums of \$3,000 for a laundry, and \$1,500 for repairs and water-works. The estimated annual expenses of the institution are \$20,000.

**THE ACADEMY FOR THE BLIND.**—This institution, established at Macon for the education of the young blind of the State, so as to enable

them to sustain themselves in after-years by their own industry, has had 66 pupils in attendance during the past year, being a few more than the highest number in any former year. The total expenses of the academy for the year have been \$10,945.81, making the *per capita* expense of the pupils \$165.84. The cost *per capita* at the Perkins Institution for the Blind at Boston, Mass., is reported to be \$422.25. The academy is situated in a healthy locality, is spacious, well ventilated and drained, and well furnished with all the special appliances that are needed for the safety, comfort, and education of the pupils. The education is literary, musical, and industrial, and the results are exceedingly gratifying. A separate department, for the instruction and care of blind colored boys and girls, has been recently organized and opened under authority of the Legislature, at an annual expense of \$4,000. A good, substantial brick building has been erected for this purpose on grounds three and a half acres in extent. The management, modes of instruction, discipline, and all other regulations, are the same as those followed in the department for the white pupils. The annual appropriation for the white department is \$12,000; for the colored, \$4,000, in addition to which, for finishing the building for the colored, improvements, repairs, etc., an appropriation of \$9,000 is asked. The principal of both institutions is Professor W. D. Williams, who has been the manager of the academy for upward of a quarter of a century.

**THE PENITENTIARY.**—The policy, wisdom, and humanity of the treatment of convicted criminals, under the existing punitive system, established by law in 1866, have been widely questioned. Instead of being confined in prisons at an immense cost to the State, the convicts are now "farmed out" on the best and most advantageous terms that the Governor can make. This mode of dealing with them was inaugurated (May 11, 1868) by General Ruger, at that time Military Governor of Georgia. It was continued by Governor Rufus B. Bullock; and the present lease, which will not expire until 1899, was executed by Governor James M. Smith, under the authority and by direction of an act of the Legislature. Under the provisions of that act, the convicts in control of the several lessees are kept and disciplined according to strict and humane rules provided by law. For instance: no one is allowed to whip or punish a convict unless authorized to do so by special appointment approved by the Governor. A violation of this rule subjects the offender to imprisonment in the Penitentiary for not less than six months and not exceeding two years. At the expiration of a convict's term of service, his lessee is compelled to provide him with transportation to his home and a suit of clothes worth not less than six dollars. It is made the duty of the grand juries of the counties in which the convict-camps are situated, to visit and inspect



them, see that the prisoners are properly fed, clothed, and housed, and that they are not inhumanly worked or otherwise ill-treated. Adequate provision is made for the medical treatment of the sick, and it is the duty of the assistant keeper of the Penitentiary to visit each camp every month and make a detailed report, under oath, as to its condition. The average number of convicts thus leased is twelve hundred, eight tenths of whom are negroes. The death-rate is rather under 1 per cent; of reconvicted criminals the rate is about 4 per cent. In two years only twenty-six have escaped. Their diet for the daily ration consists of  $\frac{3}{4}$  pound of bacon, two pounds of bread, one pint of sirup, with vegetables in their season, and peas, turnips, and potatoes in winter, and beef and mutton when procurable instead of bacon. Their clothing consists of four suits of clothes—two summer and two winter—two pairs of shoes, and a hat or cap. They are compelled to bathe and change their under-clothing once a week. The bedding is a cotton mattress, with sufficient blankets. The buildings in which they are sheltered are as good as the ordinary cabins on plantations. On October 20, 1882, the number of convicts was 1,243; of these, 112 are white males, 1 white female, 1,100 colored males, and 30 colored females. The oldest convict is seventy-eight and the youngest twelve years. The annual income derived by the State from the lease of the convicts is \$25,000. Out of this sum are paid the salaries of the principal and assistant keepers of the Penitentiary, and of the physician, and the traveling expenses for the monthly inspection of the camps. The principal keeper recommends the expenditure of the entire rental for the religious and moral instruction of the convicts.

DEPARTMENT OF AGRICULTURE, ETC.—This branch of the State government consists of a Commissioner, assistant, three clerks, a chemist, two Inspectors of Fertilizers at Augusta, one at Atlanta, one at Columbus, one at Macon, and one at Brunswick, and one Superintendent of Fisheries. Since its organization, and the establishment of the State College of Agriculture, farming has received a surprising impetus. The light of science and experiment has been shed upon the vital subject of soil-production, and the result has been an advance which the farmers of twenty-five years ago would have deemed impossible. In the increased use and demand for improved farm implements; in the more systematic and economical management of the farms; in the more thorough preparation of the soil, and in the cultivation and harvesting of crops; and in the largely increased acreable production, this advance within the past few years is as great as it is encouraging. The present system of inspection and analysis of commercial fertilizers has been of incalculable benefit in the protection it gives the farmer against the purchase of fraudulent and worthless com-

pounds. During the season of 1880-'81 there were inspected 152,404 tons of fertilizers; and during the season of 1881-'82, 125,427 tons, a decrease of 26,977 tons, mainly attributable to the more intelligent and economical use of cotton-seed, and of the other manurial resources of the farm, and also to a closer study and practice of the *art* of agriculture, so long beneficially practiced in other countries. During the year 1880-'81, the net receipts in the State Treasury from the fees for the inspection of fertilizers, after deducting all the expenses, were \$64,060.23; and for the year 1881-'82, \$50,251.32. The average of ammoniated fertilizers for 1881-'82 was: Available phosphoric acid, 10.20; ammonia, 2.48; potash, 1.58; and the average of non-ammoniated fertilizers was: Available phosphoric acid, 12.48; and potash, 1.05. Previous to 1877, when the present system was established, the fees arising from the inspection were the perquisites of the inspectors; now the inspectors are paid a fixed salary of \$1,200. One of the most noteworthy facts in the recent improvements in economical agriculture is the development of the value of cotton-seed. Its chief value as a fertilizer is the large percentage of the nitrogen it contains. This is all retained by the system of composting with stable-manure and acid phosphate; the latter, from the large percentage it contains of sulphate of lime, preventing the escape of the ammonia evolved in decomposition. It is estimated that the cotton-crop of Georgia, raised on 2,617,188 acres, amounts to 814,441 bales, yielding, at 900 pounds per bale, 366,498 tons of cotton-seed. Deducting from this amount 78,464 for planting, 288,034 tons remain for use as manure or for stock-food. These, at \$10 per ton, are worth \$2,880,340. The oil which could be extracted from this number of tons of seed would sell for \$3,528,416; the lint which remains on the seed is worth \$443,572; the oil-cake, or meal, is worth \$2,016,240, and the ash of the hulls, \$60,480, making a total value of the whole surplus crop of seed produced in the State, after reserving a liberal quantity for planting, \$6,048,888, showing the increase in value of the manipulated as compared with the green seed to be \$3,168,548. Farmers who sell their seed to the oil-mills at \$10 per ton are thus losing annually over \$3,000,000. An effort is being made to induce the Legislature to appropriate sufficient money to equip and operate one or more experimental stations in the State, to conduct experiments in fertilization, culture, stock-breeding, stock-feeding, improvement of seeds, tests of machinery, and particularly to carry on purely scientific investigations bearing upon practical agriculture. The State Agricultural Society has a large membership which represents the county societies. It meets in February and August every year, and exercises a great influence in the promotion of agricultural reforms and in the diffusion of valuable information.

The general condition of the farmers throughout the State is said to be prosperous. The abandonment of the "all-cotton" policy, and greater attention to grain-crops and home supplies, make them bear more complacently the low price of cotton.

The Commissioner of Agriculture estimates the corn-crop of the State at 36,963,940 bushels, the wheat-crop at 3,284,960, and the oat-crop at 11,643,482.

The estimated indebtedness of farmers in the whole State is 76 per cent of that of last year. According to this estimate the farmers of the State have reduced their indebtedness since last year 24 per cent.

A majority of the correspondents in every section report an advance in farm-lands since December, 1881, as follows: In North Georgia, 13 per cent; in Middle Georgia, 11.5 per cent; in Southwest Georgia, 20 per cent; in East Georgia, 15 per cent; and in Southeast Georgia, 40 per cent. The average advance in the whole State is 14 per cent.

**THE RAILROAD COMMISSION AND THE RAILROADS.**—When the Constitution of 1877 conferred the power on the General Assembly "to regulate railroad freight and passenger tariffs, preventing unjust discriminations and requiring reasonable and just rates," etc., and when subsequently, in the exercise of this authority, the General Assembly created a Board of Railroad Commissioners, compelling the various railroad companies in Georgia, under heavy penalties, to accept and obey its orders as to charges for freight and passengers, it was thought that the opposition to the commission would be violent and uncompromising, especially on the part of those roads with whose chartered or "vested" rights the commission might seem to interfere. Public opinion has so decidedly approved the legislation as a protection against monopolies, and experience has so fully demonstrated its utility as well as its impartiality, that the railroad companies have generally acquiesced and conformed to its regulations, while protesting feebly in order, as they allege, not to surrender their chartered privileges. The Georgia Railroad, from Atlanta to Augusta, 171 miles, nominally leased in May, 1881, to the late William M. Wadley, President of the Central Railroad, from Savannah *via* Macon to Atlanta, but really, as is universally understood and believed, to the Central Railroad Company, has taken exception to some freight regulations of the commissioners issued in February, 1882, and applied to the Superior Court of Fulton County for an injunction restraining the commissioners from prescribing rates of freight over the Georgia Railroad, alleging that the act creating the commission is unconstitutional, and that consequently all its acts are null and void, and praying the court to so declare. The Superior Court having refused the injunction, though suspending the enforcement of the commission's order until the case shall be finally adjudicated, appeal

has been taken to the Supreme Court of the State, where it is now pending. It will be heard in the spring of 1883, and deep interest is felt in the decision. The commission's circular, No. 20, to which the Georgia Railroad so strenuously objected, and which caused the present controversy, is thus fully and clearly explained and justified by the commissioners in their answer to the complainant's bill:

A Cincinnati or Louisville miller can ship a barrel of 200 pounds of flour from his place to Charleston, S. C., directly through Atlanta—a distance of 783 miles—for 30 cents per barrel. If an Atlanta miller shipped 300 pounds of wheat from Cincinnati or Louisville he paid therefor 93 cents freight to Atlanta—a distance of 474 miles. After grinding it into flour he then paid 60 cents per 100 pounds or \$1.20 per barrel of 200 pounds of flour freight from Atlanta to Charleston—a distance of 309 miles—making \$2.13 per barrel freight that the Georgia miller really paid on a barrel of flour ground in this State as against 30 cents that the Cincinnati and Louisville miller paid freight on a barrel of flour ground there and transported over identically the same roads and the same distance, being a discrimination of \$1.83 per barrel against the Georgia miller in favor of the Western miller, and against the farmer of our State in favor of the Western farmer. . . . Out of a rate from Cincinnati or Louisville to Charleston, S. C., the Georgia Railroad for hauling 171 miles voluntarily accepted six and one fifth cents as tolls on a barrel of flour; but the proportion of the rate on a barrel of flour shipped by a Georgia miller from Atlanta to Charleston, which that road transported 171 miles, was about thirty-two cents. That is, over five times as great a rate was collected by the Georgia Railroad on a Georgia miller's barrel of flour shipped to Charleston, S. C., as was voluntarily accepted by that road on a barrel of flour shipped by a Cincinnati or Louisville miller the same distance over its road. And in addition the Georgia miller was required to ship as much as a car-load of flour to get the benefit of even this rate, while the Cincinnati miller was permitted to ship any quantity, from one barrel up, at the greatly discriminating rates mentioned, granted him by the railroads.

The question involved is of deep interest, not only to citizens of Georgia, but to the people of every State.

The aggregate value of the taxable property of railroads in Georgia, as returned by their authorized agents for the year 1882, is \$18,729,429. Their business during the year, notwithstanding the reduction of their rates of freight and passenger fares by the Railroad Commission, and the increased and increasing competition, has been satisfactory. The roads generally are in good order; steel rails are being rapidly substituted for iron; their equipment has been much improved, and faster schedules as to running time between termini are being adopted; 325 miles of new railroad have been constructed during the year, and a number of new roads, of both broad and narrow gauge, are projected, but it is by no means certain that they will be completed within a short time.

An important decision as to the rights of railroad corporations was pronounced by the Supreme Court of Georgia in December, in the case of *Chambers vs. the Cincinnati and Georgia Railroad Company*. The road had been run through the land of Mr. Chambers, without



any previous agreement as to the price to be paid for the right of way. When Mr. Chambers specified the compensation, the company considered it exorbitant, and Chambers refused to accept that offered by the company. The matter was left to a board of appraisers, who fixed a sum which was unsatisfactory to Chambers, and he appealed from their award to the Superior Court of Floyd County, asking for an injunction restraining the company from using the route through his land. The court having refused the injunction, he appealed to the Supreme Court, which reversed the decision of the court below, on the ground that the company having been organized under the Constitution of the State, which provides that "private property shall not be taken or damaged for public purposes without adequate compensation being first paid," the company had no right to take the property of a citizen for its own use and convenience until it had paid just and adequate compensation.

**PUBLIC SCHOOLS.**—The year 1882 shows a steady growth in the attendance of pupils at the public schools. The aggregate of school population which has been made the basis of apportionment in 1882 was 507,861. The commissioner's estimate is that the enrollment and average attendance will not be less, respectively, than 255,000 and 153,000; and taking these figures, and making the same calculations as in 1881, he gives the figures, 87 cents, \$1.73, and \$2.88, as the approximate appropriation *per capita*, on school population, enrollment, and average attendance, respectively. Thus: in the year 1881 the entire sum furnished for the support of schools was \$363,677.32. Divide this sum by 433,444, the number of children of school age, and the result will be 84 cents as the *per capita* appropriation. If the same sum be divided by 244,197, the number of children that entered the schools during the year, \$1.49 is the appropriation on enrollment; and if the same sum be divided by 149,908, the average attendance, \$2.43 is the appropriation on average attendance. In 1882 the State fund, estimating the poll-tax which is paid in the several counties to the county commissioners as the same as in the previous year, amounts to \$441,114.88. And if the sum raised under local laws in counties and cities prove to be the same, that is, \$134,855.96, the whole sum raised in the State for the support of the public schools will amount to \$575,970.84, or \$77,000 increase as compared with the previous year. This, on the principle of calculation stated above, would give *per capita* on school population, \$1.13; on enrollment, \$2.25, and on average attendance, \$3.76. The sources of the school fund paid out of the Treasury are as follow:

One half rental Western and Atlantic Railroad..	\$150,000 00
Dividend on Georgia Railroad stock.....	1,116 00
Net hire of convicts.....	19,192 20
Fees of inspectors of fertilizers.....	56,198 89
Tax on shovels.....	5,794 76
Tax on liquor-dealers.....	44,767 71
Total.....	\$277,069 86

Brought forward.....	\$277,069 86
Less warrants for expenses.....	4,494 45
Total.....	\$272,574 91
Net proceeds of poll-tax.....	168,839 97
Grand total.....	\$441,114 88

The school law requires that in every county arrangement shall be made for keeping the schools in operation at least three months of the year. This is an essential condition to a right to draw the *pro rata* of the school fund of the State. This was done in every county by the parents of the school-children agreeing to supplement the sum paid by the State, and thus the entire people enjoyed the benefits of the common schools, and every child of suitable age had the advantage of entering and remaining for the term. The School Commissioner strongly recommends that the fund be increased so as to enable the schools to be kept open during six months; that means be furnished to conduct teachers' institutes, and establish at least one normal school. In an enumerated school population—that is, children between the ages of six and eighteen—of 236,319 white and 197,125 colored, making in all 433,444, the number of illiterates between ten and eighteen years is, whites 22,323, colored 63,307; and over eighteen, the number unable to read is, whites 20,839, colored 148,494. Besides the public schools there are 1,080 private elementary schools scattered over the State, with 1,183 instructors, teaching whites 26,822, colored 6,671—total, 33,493 children. Of male and female colleges, including Mercer University (Baptist), and Pio Nono College (Roman Catholic) at Macon, and Emory College (Methodist) at Oxford, and not counting the University of Georgia and its branches, there are eleven institutions of high grades, where upward of 2,000 young men and women are instructed by competent teachers. The Lucy Cobb Institute at Athens, the Wesleyan Female College at Macon, and the La Grange Female College at La Grange, are the most prominent institutions for the higher education of young ladies. The people of Georgia feel deeply grateful to Mr. George I. Seney, of New York, for his munificent donations to Emory College, the Wesleyan Female College, and the Lucy Cobb Institute. The Atlanta University, where colored students exclusively are educated, and for the support of which the State appropriates annually \$8,000—a sum equal to that paid to the University of Georgia in payment of her debt to that institution—is well conducted, and is doing successful work.

At the last General Conference of the Methodist Episcopal Church, South, held in Nashville, Tenn., May, 1882, plans were laid to build, furnish, and provide teachers for a school or college for the education of colored children, teachers, and preachers, the college to be the property of the "Colored Methodist Episcopal Church in America." The plan was formed in response to the appeal of Rev. L. H. Hol-

sey, colored bishop, for help to start an institution for the preparation of colored teachers and preachers. The work is being actively pushed. The college will be situated at Augusta, Ga. Dr. James E. Evans, one of the oldest and most esteemed ministers of the Methodist Episcopal Church, South, has been appointed commissioner, to raise the requisite funds; and Dr. Morgan Callaway, Vice-President of Emory College, has accepted the presidency of the "Paine Institute," as the new college will be called, in honor of Bishop Paine, who, in 1870, organized the "Colored Methodist Episcopal Church in America." Part of the trustees of the institute are white, appointed by the bishops of the Methodist Episcopal Church, South, and part colored, appointed by the colored bishop. This is a remarkable movement, proving that the relations between the whites and blacks are not as unfriendly as many suppose.

**MANUFACTURES, ETC.**—The "New South" has made wonderful progress in manufactures during the past few years, and Georgia is in the lead in this respect. Cotton goods are necessarily the chief manufacture; but iron-foundries, oil-mills, shoe-factories, etc., etc., have sprung up in various parts of the State, and they are all prosperous. The Atlanta Cotton Exposition of 1881 has given a great impetus to manufacturing industry. The principal cotton-factories are situated at Augusta and Columbus, the former using the water-power supplied by the canal, and the latter the water of the Chattahoochee River. The factories now in operation at Augusta are: The Augusta Factory, capital \$1,000,000; consumes annually 13,084 bales of cotton; number of looms, 779; number of spindles, 26,000; producing 15,500,000 yards of goods. The Enterprise Factory, capital \$650,000, consumes 12,000 bales; number of looms, 900; number of spindles, 30,000; producing 13,000,000 yards. The Sibley Mills, capital \$1,000,000, consuming 13,000 bales; number of looms, 800; number of spindles, 30,000; producing 12,000,000 yards. The Summerville Mills, capital \$100,000, consuming 1,500 bales; number of looms, 150; number of spindles, 4,000; producing 2,250,000 yards. The Globe (private enterprise), consuming 2,000 bales; number of spindles, 5,800, producing warps and yarns. Riverside Waste-Works (private), consuming 2,000 bales; number of spindles, 2,400, producing warps and yarns. Sterling Mills (private), consuming 1,000 bales; number of spindles, 2,800, producing warps and yarns; and Goodrich (private), consuming 600 bales; number of spindles, 2,000, producing warps and yarns. The John P. King Mills, in process of construction, and nearly complete, have a capital of \$1,000,000, and will run 750 looms and 25,000 spindles. Total number of looms, 3,379; of spindles, 128,000; of bales of cotton consumed during the year, 57,100. As evidence of the prosperity of these factories it is only necessary to see the profits which

they have divided annually for several years. The Augusta Factory, the oldest and best known, has paid in cash dividends from 1865 to 1882, \$1,467,000, or about two and a half times its capital. Besides this, it has a surplus of between \$340,000 and \$350,000, or over 50 per cent of its capital. Its stock is worth \$170 per share.

The Augusta Crescent and Excelsior Flour Mills manufactured during the year 140,000 barrels of flour, valued at \$1,050,000, and 750,000 bushels of meal, valued at \$637,500. Another large and growing industry at Augusta is the Georgia Chemical Works, with a capital of \$200,000, for the manufacture of fertilizers. They made and sold during the year 15,000 tons, half of which amount was ammoniated and half acid phosphate. None but the highest grades are made by this factory. A factory has been built and is in operation at Kirkwood, near Atlanta, where sulphuric acid is made out of the iron pyrites, thousands of tons of which are scattered over the rocky hills, and at a much less cost than it could be produced from the imported sulphur. In immediate proximity to these works are two fertilizer-factories, a cotton-seed-oil mill, and works for the reduction of copper.

The principal factories at Columbus are: The Eagle and Phoenix Mills, capital \$1,250,000, running 45,710 spindles and 1,600 looms, making 100 varieties of goods; the Columbus Manufacturing Company, capital \$263,000, running 4,156 spindles and 136 looms, making sheetings and domestics; Muscogee Manufacturing Company, capital \$157,000, running 5,000 spindles and 240 looms, making cottonades and domestics; the Steam Cotton Mills, capital \$30,000, running 3,000 spindles, making yarn and thread; the Excelsior Mills, capital \$25,000, running 96 looms, making checks and plaids; and A. Clegg & Co., capital \$10,000, running 48 looms, making checks and stripes. Besides the above, there are at Columbus a jute-factory, turning out 2,000 yards of bagging daily; iron-works, plow-factory, two large flour-mills, a trunk-factory, a clothing-factory, a paper-box factory and a gas-light company, with an aggregate capital of \$2,043,500. There is a cotton-factory at Atlanta, three at Athens, and other small mills in other parts of the State. From the large dividends paid to their stockholders by those that are well managed, and the large sums added annually to the surplus fund, after liberal expenditures for new buildings, machinery, repairs, etc., these industries have proved unusually profitable during the year. A number of cotton-seed-oil mills have been started, or are being built. Broom-factories, works for the manufacture of wooden-ware, ice-factories, carriage and wagon factories, and a number of other industries—some pretentious from large capital, others quite modest—have sprung into existence, making Georgia's claim to be a manufacturing State incontestable.



A good deal is said and written as to the immensely profitable yields of the gold-mines in the northern part of the State. How far these statements are exaggerated, and how far true, can not be ascertained in the absence of disinterested information. The State is said to contain 3,500,000 acres of gold-bearing land, interspersed with land containing 165 different minerals, among the most valuable and useful of which are gold, silver, copper, lead, zinc, iron, coal, mica, asbestos, graphite, marble, limestone, granite, corundum, soapstone, kaolin, clay, marl, gypsum, as well as every species of precious stone, from the diamond to the agate.

The iron industries in Northwestern Georgia have been very prosperous, and their production much increased. The close proximity to the iron-mines of inexhaustible beds of good coal makes the iron industry as profitable as it is. A large number of the Penitentiary convicts are leased to the stockholders, and worked by the mining companies. The report of the Comptroller-General estimates the value of the iron-works in the State in 1882 at \$569,231, an increase of \$219,282, as compared with their value—\$349,949—in 1881. His estimate of the amount of capital invested in mining in 1882 is \$127,622, as compared with \$101,675 in 1881.

The lumber interest has grown immensely during the past year. The exports coastwise from the port of Savannah alone up to August 31st were 57,868,627 feet, and the foreign exports 14,675,279, making a total of 72,043,906 feet. The production of turpentine and naval stores from the immense pine-forests of the southern portion of the State has also increased largely, and is a most profitable industry. The exports from Savannah for the year ending August 31st were: Turpentine, 1,635,250 gallons, worth \$736,593; rosin, 168,408 barrels, worth \$408,418.

**STATE ELECTIONS.**—Elections were held this year throughout the State for Governor, members of the General Assembly, and other State officers, and for members of Congress, including the additional member to which the State is entitled under the late apportionment act of Congress, and who was to be elected by the "State at large," as the General Assembly had not yet defined the limits of the Tenth District.

Unusual popular interest was felt in these elections in consequence of the declared coalition of the Republicans and "Independents," with a view to defeat the organized Democratic party, and thus not only obtain control of the State government, but break the "solid South," by electing anti-Democratic representatives in the Lower House of Congress, and possibly a United States Senator.

The Republicans were not quite harmonious. In their convention, which met in Atlanta, August 2d, one hundred and eighty delegates obeyed the call of W. A. Pledger, colored, the

"Chairman of the State Central Committee" (since appointed collector of customs at Atlanta), and one hundred delegates went into another and antagonistic convention, headed by the white Republicans, or the so-called "Georgia Syndicate," led by General James Longstreet, United States Marshal, and H. P. Farrow, former District Attorney. Both conventions made nominations, but they subsequently agreed to support the opposition to the Democratic candidate, although the differences between the leaders were not adjusted. At one time the contending factions came to blows, and Pledger was arrested and obliged to give bonds for his appearance on a charge of assault and battery.

The Democratic Convention, which met in Atlanta, July 19th, for the purpose of nominating candidates for the offices of Governor, Congressman-at-large, Secretary of State, Treasurer, Comptroller-General, and Attorney-General, having decided by a vote of 194½ to 164½ that a "majority only of the entire vote of this convention (instead of two thirds) shall be necessary to nominate," nominated as follows: For Governor, Hon. A. H. Stephens, of Taliaferro County; for Congressman-at-large, Thomas Hardeman, of Bibb County; Secretary of State, N. C. Barnett, of Baldwin County; Treasurer, D. N. Speer, of Troup County; Comptroller-General, W. A. Wright, of Richmond County; Attorney-General, Clifford Anderson, of Bibb County. A. O. Bacon, the most prominent aspirant for the nomination for Governor, having withdrawn before a ballot, the nomination of Mr. Stephens was practically unanimous, receiving 325 out of 364 votes. The other State officers were nominated by acclamation. For Congressman-at-large, the names of Thomas Hardeman, George Barnes, Henry H. Carlton, and W. H. Dabney were presented. Mr. Hardeman having received 208 votes, his nomination was then made unanimous.

The Independent candidate for Governor, indorsed by the two factions of the Republicans, by the Greenbackers, and by those opposed to the organized Democracy, as well as those who personally disliked Mr. Stephens, was Lucius J. Gartrell, a prominent lawyer of Atlanta, and prior to the war a member of the Federal Congress. After an energetic canvass, during which both candidates made several speeches, at the election in October the people elected Alexander H. Stephens by a majority of 62,357 out of a total vote of 152,949, electing at the same time all the regular Democratic nominees for subordinate State officers, and members of the Senate and House of Representatives of the General Assembly.

The Legislature met on the 1st of November. Hon. James S. Boynton was re-elected President of the Senate, and the Hon. Louis F. Garrard was chosen Speaker of the House of Representatives. The outgoing Governor, Alfred H. Colquitt, in his last message to the Legislature, makes the following cheering statements as

to the material and moral condition of the State:

In transmitting this my final message to the Legislative branch of the State government, in compliance with the requirement of law and custom, I perform the duty with the deepest of gratitude to the Giver of all good, and with elated feelings in view of the state of our beloved Commonwealth. We have never had better reason for congratulation at our present condition or for hopefulness of the future of the State than we claim at this time. In our recent history our retrospect has often been of the saddest, while the prospect had but scanty promise.

The strain to which our powers of endurance and recuperation were subjected was such as to dispirit the most hopeful and resolute, and our deliverance from the ordeal that threatened to overwhelm and destroy us seems to have been achieved by a wisdom above that of man.

Without arrogance or vainglory let us rejoice that under the signal blessing of Providence we are pressing on to take our place abreast of the most advanced states in Christendom, and with an intense love of the arts of peace and a generous emulation of older and more favored commonwealths, we are establishing and diffusing among our citizens the most potent and beneficial agencies and methods for the development of the highest civilization.

We may justly claim for our State that in every department of our industry our people are prospering and advancing. In our agriculture—in our mining operations—in the introduction and multiplication of mechanical establishments—in the wonderful extension of our lumber interests—in the marked improvement in the healthfulness of our State, we find the most substantial grounds for self-gratulation.

And superadded to this cheering summary of material advantage and promise, we may felicitate ourselves upon the general peacefulness and good order which have prevailed throughout the State. With a very few, but unhappily marked, exceptions, the public tranquillity has been undisturbed by outbreaks of violence, and there seems to be a pervading spirit of conciliation which has successfully resisted all unfriendly influences.

Mr. Stephens was inaugurated Governor of Georgia on November 3, 1882. The following is his inaugural address:

GENTLEMEN OF THE GENERAL ASSEMBLY, SENATORS AND REPRESENTATIVES: Having received your official notification of my election to the chief magistracy of the State, I now appear before you, according to a joint resolution of your respective bodies, to take the official oath prescribed by the Constitution.

Before taking this oath and assuming the discharge of the duties of the office thus conferred, in conformity with immemorial custom, it is doubtless expected that I shall present some remarks indicative of the general line of policy which will mark my administration. These views, concisely stated, I shall address not only to you, gentlemen of the General Assembly, but to the large and respected auditory of citizens, comprising ladies and gentlemen, who grace and honor these inaugural ceremonies.

Indulge me, then, fellow-citizens, in saying that, being called to this high office by the voice of the people, I shall enter upon its duties with no feelings of elation, but rather of deep depression, from a profound sense of the weight of responsibility attending this new position. I am entirely untrammelled; I have no promises or pledges to redeem, except faithfully to discharge the duties of the office to the best of my ability; I have no enemies to punish; no personal aims or objects to accomplish; no partisan views to advance; no purpose to promote the schemes or objects of any combination or class of persons whatever; and nothing to serve but the interests of the

people, the whole people of the State. With the co-operation of the legislative department of the government my efforts will be directed with an eye single to the advancement and promotion of the general peace, welfare, and prosperity of our beloved State.

In the administration of the laws, as far as lies in my power, it will be my object to see that equal justice is done to all alike.

All our industrial pursuits, agriculture, manufacturing, mechanical, commercial, mining, shipping, and internal transportation, should be looked after with care. All those institutions, educational, benevolent, and others, which are provided for by our fundamental law, should be fostered and promoted to the extent of legislative ability, with like care and attention. In this way we shall be able to promote and add to the honor and glory and renown of our good old Commonwealth.

As to general measures in practical legislation, I have nothing further to offer than my past public record, in a long and not uneventful life. This is the only guarantee as to the character of my acts in the future.

As to those general political principles by which my administration, Providence permitting, shall be governed, I can but repeat what was said in my acceptance of the nomination tendered me for the office.

I repeat these on this more solemn occasion with an emphasis, and especially because of an evident and growing disposition in many quarters of the country to neglect and ignore them.

These are those essential principles of republican government which lie at the foundation of our whole system of free institutions, and which can be maintained only by being deeply impressed upon the minds of legislators, and all other officials of whatever grade or character, as well as upon the masses of the people, and especially the rising generation.

These are the principles announced by Thomas Jefferson, and adopted by the fathers of the republic early after our complicated system of government was instituted.

These principles apply as well to our Federal system as to the several State governments, and by their maintenance the harmony and success of the system can only be preserved and perpetuated. They are as follows:

"Equal and exact justice to all men of whatever state or persuasion, religious or political."

"The support of the State governments in all their rights, as the most competent administrators of our domestic concerns, and the surest bulwark against anti-republican tendencies; the preservation of the General Government in its whole constitutional vigor, as the sheet-anchor of our peace at home and safety abroad."

"A jealous care of the right of election by the people."

"Absolute acquiescence in the decisions of the majority, the vital principle of republics, from which there is no appeal but to force, the vital principle and immediate parent of despotism."

"The supremacy of the civil over the military authority."

"Economy in the public expense, that labor may be lightly burdened."

"Encouragement of agriculture, and commerce its handmaid."

"Freedom of religion, freedom of the press, freedom of person, under the protection of *habeas corpus*, and trial by juries impartially selected."

"These are some of the principles," said Jefferson, "which constitute the creed of our political faith, the text of civil instruction, the touchstone by which to try the services of those we trust; and should," said he, "we wander from them in moments of error or alarm, let us hasten to retrace our steps, and to regain the road which alone leads to liberty and safety."

These are what constitute the essentials of the creed of Jeffersonian Democracy. They were proclaimed



when there was a strong tendency to abandon the federative feature in the Government, and to merge the State governments into consolidation or centralism, the inevitable end of which would have been empire and despotism.

The object of the founders of the old Republican-Democratic party, at the head of which stood Mr. Jefferson, was to check this tendency of the government, and to preserve that system from which alone springs all hope for the perpetuation of the entire fabric. These principles look as well to the preservation of the Federal Union in its proper sphere as to the maintenance and preservation of the reserved rights of the several States, in their proper spheres, under the Constitution of the United States. This is the true doctrine of home rule on the part of the States under our novel and wonderful system of Federal Union.

There is evidently now, my countrymen, a tendency to centralism as in 1798 and 1799, by the party now in power in the administration of the General Government, bearing the name of Republican.

As Burke upon a memorable occasion appealed "from the new Whig party of England to the old Whigs of his earlier days," so we appeal from modern Republicanism to the ancient creed of our fathers.

Those who have departed, or are departing, from that path under apprehension of danger, we and all friends of the Constitution, organized from one extent of the Union to the other, should awake to "retrace their steps, and to regain the road which alone leads to liberty and safety."

I am now prepared to take the oath of office.

Among the earliest and most important duties devolved upon the Legislature was the election of a Judge of the Supreme Court, *vice* A. M. Speer, whose term had expired, Judges of the Superior or Circuit Courts, and a Senator in the Federal Congress to fill the unexpired term of, and after March 4, 1883, succeed the late Benjamin H. Hill.

To the first-named office, Hon. Samuel Hall, of Macon, a lawyer of high character and great learning, was elected. John D. Stewart was elected Judge of the Flint Circuit; T. J. Simmons re-elected Judge of the Macon Circuit; Allen Fort, Judge of the Southwestern Circuit; B. B. Bower, Judge of the Albany Circuit; A. P. Adams, Judge of the Eastern Circuit; John B. Estes, Judge of the Northeastern Circuit, and W. R. Hammond, Judge of the Atlanta Circuit. The contest for the senatorship was active and heated. The candidates for the unexpired term (December, 1882-March 4, 1883) were B. H. Hill, Jr., eldest son of the deceased Senator, and Pope Barrow, a former member of the Legislature from Clarke County. The candidates for the term of six years from March, 1883, were ex-Governor Alfred H. Colquitt, Chief-Justice James Jackson, Hon. Clifford Anderson, and Hon. J. C. C. Black. The result was the election, on the first joint ballot, of Pope Barrow for the short term, by a vote of 116, to 95 for Hill. For the long term ex-Governor A. H. Colquitt was elected on the second ballot, receiving 123 votes; necessary to a choice, 109. After a session of five weeks, the Legislature adjourned until the first Wednesday in July, 1883. The election of judges and Senators, the passage of the appropriation and tax bills, the refusal to accept Senator Brown's

donation to the University of Georgia, and the passage of a few bills of local interest, constituted the legislation of the session. The restricting of the State in conformity with the last apportionment act of Congress, the usury bill, and the question of building a new Capitol, have been postponed till next July. Resolutions were adopted asking Congress to repeal the tax of 10 per cent on the circulation of the State banks; the repeal or modification of the internal revenue laws; the repeal of the statute of limitation barring cotton claims; the erection of public buildings at Brunswick; the establishment of a local postal route; and aid to education in the State out of the proceeds of sales of the public lands. It is gravely questioned whether, under the Constitution of the State, the General Assembly has the right to adjourn for seven months, so as to defeat practically the provision of the organic law against annual sessions. The Constitution directs that the General Assembly shall meet "on the first Wednesday in November, 1878, and *biennially* thereafter, on the same day, until the day shall be changed by law." This seems to settle the time of meeting, and to limit the number of sessions to one, every two years. The Constitution further declares that "no session of the General Assembly shall continue longer than forty days, unless by a two-thirds vote of the whole number of each House." This provision, it is argued, is intended to supplement the provision already quoted, and provide for cases in which forty days would not be sufficient time to transact the necessary business; but that it applies to a continuous session. The framers of the Constitution certainly intended that the sessions of the Legislature should be held only once in two years, and that they should be limited to forty days except in cases of emergency. The estimated expense of a legislative session of forty days is \$42,613. The summer session will cost as much or more, making the whole expense not less than \$85,226. With a view to obviate any necessity for the "adjourned sessions," a proposition has been made, and is now pending, to amend the Constitution so as to take the election of judges and solicitors-general out of the hands of the Legislature and delegate their appointment to the Governor, by and with the advice and consent of the Senate. Every Legislature, since the adoption of the Constitution, has held annual, or adjourned sessions, alleging, as excuse for the apparent violation of the law, that the election of judicial officers had consumed the regular fall session. The appointment of these officers by the Executive would involve no expense. The charge of mileage by the members of the General Assembly, amounting in the aggregate to \$6,572, when most of them are known to hold and to use free passes over all the railroads, is the subject of much comment.

The election of members of Congress to serve in the Forty-eighth Congress took place

according to law on Tuesday, November 7th, and resulted as follows: First District, John C. Nichols, Democrat, 6,055 votes; James Atkins, Republican, 3,884. Second District, Henry G. Turner, Democrat, 7,794; Charles Wessolowski, Republican, 4,406. Third District, Charles F. Crisp, Democrat, 4,121; D. B. Harrell, Independent, 329. Fourth District, Hugh Buchanan, Democrat, 5,583; J. F. Pon, Independent, 1,402. Fifth District, N. J. Hammond, Democrat, 10,788; A. E. Buck, Republican, 5,756. Sixth District, James H. Blount, Democrat, 3,514; scattering, 26. Seventh District, J. C. Clements, Democrat, 12,408; William H. Felton, Independent, 10,746. Eighth District, Seaborn Reese, Democrat, 4,384; no opposition. For unexpired term in Forty-seventh Congress of Alexander H. Stephens, resigned, Seaborn Reese, 4,282; no opposition. Ninth District, Allen D. Candler, Democrat, 14,521; Emory Speer, Independent, 11,915. At large, Thomas Hardeman, Democrat, 81,443; C. D. Forsyth, Republican, 24,930. The contests in the Seventh and Ninth Districts were warm and excited. They were the battle-ground on which was fought the contest between the regular Democratic party and the "Independents," the latter receiving the almost unanimous support of both white and colored Republicans.

**DEATHS.**—Several distinguished Georgians have died during the year. Among the most prominent were Hon. Benjamin Harvey Hill, United States Senator; Colonel William Tappan Thompson, for thirty years editor of the "Savannah News," and author of "Major Jones's Courtship" and other works; William M. Wadley, President of the Central Railroad; William L. Mitchell, LL. D., Professor of Law in the University of Georgia; and Colonel E. C. Anderson, ex-Mayor of Savannah.

**MISCELLANEOUS.**—A singular question has arisen as regards the Southern Mutual (Fire) Insurance Company, of Georgia. The company having accumulated a sufficiently large reserve fund to give ample security to their policy-holders, desire legal direction as to what shall be done with the annual interest on the reserve fund, if the surplus is not to be increased in future. The profits of the business, arising from premiums, are now divided annually among the policy-holders, and the question is, how this interest is to be divided, whether exclusively among those who are now members as actual policy-holders, or those also who have held policies in the past, but have severed their connection with the company. The company has filed a bill praying the court to give direction on these points.

Edward Cox, who killed Colonel Robert Alston two years ago, and was sentenced to the Penitentiary for life, was pardoned by Governor Stephens on December 11th, in answer to a numerous signed petition.

The Art Loan Exhibition of the Young Men's Library Association, of Atlanta, was

a great success. The receipts amounted to \$4,400.

Several Artesian wells have been bored in Southwestern Georgia, where hitherto the supply of fresh water was neither abundant nor of good quality. The deepest is at Albany, 570 feet, yielding thirty gallons per minute, as clear as crystal and sufficiently cool. The temperance movement is rapidly gaining ground. Under the "local-option" law the sale of spirituous liquors has been entirely prohibited in over one hundred towns and villages, and the people are much gratified by the result. The law now requires all liquor-dealers in the State to register in the office of the ordinary of the county where they propose to do business, and immediately on registration to pay the collector the tax for the whole year.

The question of paying the bonds pronounced to be illegal and void by the General Assembly, and the payment of which is expressly forbidden by the Constitution, has been again mooted, but with no probability of any attempt to reopen the matter being successful. Nothing short of a change in the Constitution could enable the Legislature to entertain the question. Congress having made two United States Judicial Districts in Georgia, Judge Henry Kent McCay, former Associate Justice of the Supreme Court (appointed by Governor Bullock), has been made the judge of the new court by the President. The appointment has been approved by all parties.

**GERMAN EMIGRATION.** The report of the Imperial Commissioner of Emigration for 1881 states that the emigration for that year exceeded the highest figures reached in former years by fully 100,000. The total number of emigrants from the ports of Hamburg, Bremen, and Stettin, was 247,346, of whom 184,369 were Germans. The total number from Hamburg and Bremen alone was 245,898, who came from the following countries:

COUNTRIES.	Emigrants.
Germany .....	182,985
Austria-Hungary .....	85,517
Russia .....	9,409
Sweden and Norway .....	5,014
Denmark .....	4,711

Of this number, no less than 241,478 went to the United States, of whom 179,507 were Germans. Of other countries, Brazil received 1,654, including 1,211 Germans, and Australia 816 emigrants, of whom 745 were Germans. Of the German emigrants, 98,510 left by way of Bremen, 84,425 by way of Hamburg, and 1,434 by way of Stettin, in all 184,369, of whom 106,648 were males and 77,721 females. In addition to this number, 26,178 German emigrants left by way of Antwerp, of whom 16,587 were males and 9,591 females. The largest number of emigrants came from the eastern provinces of Prussia, Pomerania furnishing 25,027; West Prussia, 23,045; and Posen, 21,315. Among other parts of the empire which furnished large numbers of emigrants are Hanover, 13,909; Schleswig-Holstein, 12,161; Mecklen-



burg-Schwerin, 3,731; and Oldenburg, 1,889. The total number of emigrants from Germany during the past decade was as follows:

YEAR.	Total emigrants.	German.
1871.....	75,912	73,816
1872.....	125,650	120,056
1873.....	103,698	96,641
1874.....	45,412	42,491
1875.....	30,773	27,884
1876.....	28,368	22,767
1877.....	21,964	18,240
1878.....	24,217	20,373
1879.....	33,327	30,808
1880.....	106,190	103,115
1881.....	210,547	206,189
Total .....	805,098	762,381

The report states, with regard to the condition of the emigrants, that they appear to belong to a much better class than in former years. In the latter part of the year large numbers of Hungarians and Russian Jews left the German ports.

It is a notable fact that the thinnest populated parts of Germany furnished the largest number of emigrants, notably, as stated above, West Prussia, Pomerania, Posen and Mecklenburg. The reason for this is to be found, not only in the extremely low wages paid in these provinces, but principally in the fact that it is almost an impossibility for the poorer inhabitants to secure their own home, and that they therefore naturally turn to the United States, where it is easier to attain that end, which for these people is the principal aim of life. The real estate in these provinces is entirely in the hands of large landed proprietors, and manufactures there are none, so that the laborers are compelled to submit to the conditions which the large proprietors can offer to them. The few small farmers are not able to compete with the great lords of the country on account of the absence of roads and markets for their produce; and, in order to avoid having their property sold for debt, they embrace the first opportunity that offers, to sell their property, and to seek a new home beyond the sea.

**GERMAN RAILROADS.** A strong movement has been on foot in Germany since 1876 to have the railroads throughout the empire become the property of the Imperial Government. The first step in that direction was taken by the Prussian Government, which in 1876 introduced a bill in the Diet providing for the sale of the Prussian railroads to the empire. In this bill stress was laid upon the long-needed reform of railway affairs in Prussia, and the dangers of further delay in attending to the matter were pointed out. The most remarkable passage in the reasons given for the urgency of the matter was the following: "In case the endeavors of the Prussian Government respecting the transference of the Prussian railway property to the empire should fail, by the opposition of some influential parties in the empire, there would be no doubt that Prussia herself would try with the greatest energy to

accomplish the task, and would have especially to consider, as the next step in the carrying out of her railway policy, the enlargement and consolidation of her own railway system. The consequence of this Prussian railway policy would then probably be that, by enlargement of the state railway system, and full development of the influence arising from the possession and administration of the railroads, the ascendancy of the interests of the Prussian lines would be felt far beyond the limits of Prussian territory." The bill was adopted by the Diet, but the necessary treaties were not concluded with the empire, as the opposition to the project was too great. The Prussian Government has, however, carried out what it called its next step in its railroad policy, the consolidation and enlargement of its own railroad system. On April 1, 1879, a special Ministry of Public Works was created, for the particular purpose of inaugurating a vigorous railroad policy. The negotiations, which had been already begun, and were now entered into by the new ministry, led, as early as June, to the purchase of the Berlin and Stettin, the Magdeburg and Halberstadt, and the Hanover and Altenbeken Railroads, and in August of the Cologne and Minden road. These purchases were ratified by the Diet in its next session, and were followed in 1880 by the purchase of several other roads, notably among them the Rhenish road, and the Berlin, Potsdam, and Magdeburg road, so that the total length of the Government roads in Prussia in 1880 was 6,910 miles. After these great purchases it seemed to be the opinion of the members of the Diet that a pause should be made in the process of changing private roads to Government roads; and although the Government has proposed the purchase of a number of roads during the past years, it has met with but little success. The feeling that the results of the purchases of 1880 should be awaited, was too manifest. The Government declares that even now the results are not only of the most satisfactory character, but surpass all expectations. It has met the complaints made by its opponents with the assertion that they were based on evils which were inseparable from a state of transition, such as the railroad system of the country was passing through at the present time, and which would disappear when the entire system had been permanently fixed. On the other hand, Herr Maybach, the Minister of Public Works, referred to expressions of encouragement which he had received from the business community. The year 1882 showed again a greater activity on the part of the Government in adding more private roads to the Government railway system, and the influence of Prussia on the entire system of the empire has now become so great that the question is beginning to be discussed whether the time has not come to accept a possible offer of Prussia to transfer its railroads to the empire. This seems to be the point aimed at by Prince Bis-

marck, and there can be no doubt that it would be of greater advantage to the small German states to have the railway system of Germany controlled by the Imperial Government than by Prussia, as it is now.

GERMANY, an empire in Europe, formed by the union of the German states, consummated on May 4, 1871, when the Constitution of the German Empire replaced the articles of confederation between the North German states and the treaties by which the Grand Duchies of Baden and Hesse and the Kingdoms of Bavaria and Württemberg entered the League during the Franco-Prussian War. This war, and the previous one with Austria, prepared the way for the re-establishment of the German Empire under the Prussian head, thus realizing the cherished aspirations of the German people. King Wilhelm I was proclaimed German Emperor from Versailles on the 18th of January, 1871, upon the successful termination of the war with France. He was born March 22, 1797, and ascended the Prussian throne on the death of his brother, January 2, 1861. On May 6th a male child was born to his eldest grandson, making the fourth living Hohenzollern in the direct line of succession to the two thrones. The heir-apparent, Friedrich Wilhelm, was born October 18, 1831.

The sovereign powers of the confederation of states forming the empire are invested in the Prussian crown and the Federal Council, but the concurrence of the Parliament, or Reichstag, elected by universal suffrage, is necessary to the exercise of certain functions. The popular assembly possesses, also, a limited right of control over the acts of the Government.

STATISTICS.—The area and population of the twenty-five states composing the German Empire, and of the Reichsland of Alsace-Lorraine, as returned at the last two census enumerations, were as follow:

STATES OF THE EMPIRE.	Area in square miles.	Population, Dec. 1, 1876.	Population, Dec. 1, 1880.
Prussia.....	187,066	25,742,404	27,279,111
Bavaria.....	29,292	5,022,390	5,284,778
Württemberg.....	7,675	1,881,505	1,971,118
Saxony.....	6,777	2,760,586	2,972,805
Baden.....	5,851	1,507,179	1,570,254
Mecklenburg-Schwerin.....	4,884	558,785	577,055
Hesse.....	2,866	884,218	986,840
Oldenburg.....	2,417	319,814	387,478
Brunswick.....	1,526	327,498	349,867
Saxe-Weimar.....	1,421	292,938	309,577
Mecklenburg-Strelitz.....	997	95,673	100,269
Saxe-Meiningen.....	983	194,494	207,075
Saxe-Coburg.....	869	213,585	232,592
Saxe-Altenburg.....	816	182,569	194,716
Waldeck.....	466	54,748	56,522
Lippe.....	445	112,452	120,246
Schwarzburg-Rudolstadt.....	840	76,676	80,296
Schwarzburg-Sondershausen.....	818	67,490	71,107
Reuss-Schleiz.....	297	92,375	101,830
Schaumburg-Lippe.....	212	88,193	95,874
Reuss-Greiz.....	148	46,965	50,782
Hamburg.....	143	388,618	458,869
Lübeck.....	127	56,912	63,571
Bremen.....	106	142,200	156,728
Alsace-Lorraine.....	5,580	1,581,804	1,666,670
Total.....	212,091	42,727,360	45,234,061

In 1816, at the end of the Napoleonic wars, Germany had a population of 23,103,211. In 1837 it was 30,010,711, showing an annual increase in the thirty years of nearly  $1\frac{1}{4}$  per cent. The increase between that date and 1858, when the population stood at 35,334,538, was little more than three fourths of one per cent per annum. In 1867 the total was 38,495,926, showing an increase of only five eighths per cent per annum. Between 1867 and 1871, in which period the great war with France occurred, the rate of increase was '58 per cent; but, in the period succeeding the war, between 1871 and 1875, it rose to 1.01 per cent. In the last census period, between 1875 and 1880, it was again about '58 per cent.

Of the total population of the empire, 62½ per cent belong to the Protestant confessions, 36 per cent are Catholics, 2 per cent are Christians of other creeds,  $1\frac{1}{4}$  per cent are Israelites, and 1 per cent of other beliefs. The number of Protestants and Catholics in the different states was as follows:

STATES.	Protestants.	Catholics.
Prussia.....	16,712,720	8,625,840
Bavaria.....	1,892,120	3,578,142
Saxony.....	2,674,905	73,848
Württemberg.....	1,296,650	567,375
Baden.....	517,561	958,916
Alsace-Lorraine.....	255,229	1,204,081
Hesse.....	602,850	251,172
Mecklenburg-Schwerin.....	548,741	2,255
Oldenburg.....	215,054	71,743
Anhalt.....	208,288	8,478
Other states.....	2,284,375	89,675
German empire.....	26,718,823	15,371,227

The movement of population in 1880 was reported as given in the table at the head of the following page.

The total number of vessels entering German ports in 1880 was 55,282, of 7,775,559 aggregate tonnage: 40,045, of 3,657,638 tons, carried the German flag; 46,130, of 7,095,522 tons, were with cargoes; 13,923, of 4,899,648 tons, were steamships; of which 7,807, of 1,935,882 tons, were German. The total number cleared was 55,021, of 7,763,087 aggregate tonnage: 39,569, of 3,633,628 tons, German ships; 39,097, of 5,475,721 tons, laden; 13,928, of 4,914,328 tons, steamers; of which 7,799, of 1,940,151 tons, were German.

The German merchant marine consisted at the beginning of 1881 of 4,660 vessels, of 1,181,525 aggregate tonnage; as against 4,777, of 1,171,286 tons, in 1880; 4,804, of 1,129,129 tons, in 1879; 4,805, of 1,117,935 tons, in 1878; and 4,809, of 1,103,650 tons, in 1877. The number of steam-vessels was 414, of 215,758 tons, having increased from 318, of 180,946 tons, in 1877. The crews of the 4,660 ships number 39,660 men. Of the total number of ships, 2,749, of 738,260 tons, among them 213 of the steamships, registering 160,556 tons, belong in North Sea ports; while 1,911 ships, of 443,265 tons, including 201 steamers, of 55,202 tons, ply the Baltic.



STATES.	Marriages.	Births.*	Deaths.*	Still-births.	Excess of births.
Prussia.....	208,456	1,071,778	785,705	42,827	386,068
Bavaria.....	34,958	209,724	159,499	7,010	50,225
Saxony.....	25,626	128,520	92,300	5,148	36,220
Württemberg.....	18,058	81,420	59,896	3,056	22,024
Baden.....	10,070	57,571	41,438	1,738	16,138
Alsace-Lorraine.....	9,826	67,888	41,609	1,867	10,279
Hesse.....	6,815	32,502	22,521	1,317	9,981
Other states.....	29,030	180,098	88,063	4,953	42,065
German Empire.....	387,842	1,764,096	1,241,126	67,921	522,970

The total value of imports of merchandise in 1880 was 2,835,600,000 marks, against 3,773,200,000 marks in 1879 (one mark = 23·8 cents); the value of merchandise exports, 3,046,100,000 marks, against 2,775,700,000 marks in 1879. There were 320,700,000 marks of cereals imported and 194,200,000 marks exported, against 687,700,000 marks imported and 194,200,000 marks exported in 1879; the imports of fermented liquors were only 39,900,000 marks, against 116,500,000 marks, the exports 54,800,000 marks, against 62,600,000 marks; the imports of colonial wares, 172,300,000 marks, against 230,300,000 marks, the exports 144,000,000, against 122,400,000 marks; the imports of tobacco were only 23,900,000, against 110,200,000 marks, the exports 3,700,000, against 3,200,000 marks; the imports of seeds, fruits, and vegetables were 110,700,000 marks, against 125,300,000, the exports 52,100,000 marks, against 77,700,000; the imports of meat, provisions, and live animals, 317,600,000 marks, against 357,000,000, the exports 196,400,000 marks, against 262,800,000. The total imports of raw materials were 910,500,000 marks, against 1,249,600,000 marks, the falling off being distributed over textile materials, hides and leather, wood, metals, fuel, and the other articles of the list; the exports of raw materials were 501,900,000 marks, against 685,800,000. The imports of manufactured articles were about the same in both years, being 495,000,000 marks, against 491,700,000 in 1879; but the exports of finished products increased from 971,900,000 marks in 1879 to 1,436,700,000 marks in 1880. The miscellaneous class of drugs, fats, chemicals, colors, etc., showed a like increase in the exports, which rose from 234,300,000 to 462,300,000 marks, and the imports from 404,900,000 to 445,000,000 marks. Specie imports amounted to 40,800,000 marks, and exports to 53,300,000, against 119,600,000 marks imported and 45,800,000 exported in 1879.

**ARMY AND NAVY.**—The Prussian system of universal military service was extended over the entire empire by the Constitution of April 16, 1871. Every German capable of bearing arms is obliged to serve seven years, three with the colors and four in the reserve, after which he is liable to service in the Landwehr for five years more. By the Landsturm Act, passed in 1875, all men capable of bearing arms who are not in the line, the reserve, or the Landwehr, are to be enrolled in the Landsturm, which is divided into two classes, the first class compris-

ing all able-bodied men under forty-two years of age, and the second class the remainder of the adult male population. The first class only has been organized. The German army on the peace footing comprises 161 regiments of infantry of three battalions each, besides 20 jäger or rifle battalions and 275 battalions in the Landwehr; 93 regiments, divided into 465 squadrons, of cavalry; 37 regiments, containing 89 divisions and 341 batteries, of field artillery; 14 regiments, divided into 31 battalions and 126 companies, of heavy artillery; 17 battalions, divided into 68 companies, of pioneers; and 18 battalions with 41 companies in the train. The peace effective of the army is as follows:

PEACE EFFECTIVE.	Officers.	Men.	Horses.	Guns.
Staff division.....	2,014	4	....	....
Infantry:				
Line.....	9,582	278,846	....	....
Jägers.....	424	11,120	....	....
Landwehr.....	848	4,763	....	....
Total.....	10,804	294,709	....	....
Cavalry.....	2,358	64,699	62,581	....
Artillery:				
Field.....	1,801	34,817	16,591	1,374
Heavy.....	726	16,849	....	....
Total.....	2,527	51,166	....	....
Pioneers.....	412	10,888	....	....
Train.....	200	4,905	2,457	....
Special corps.....	818	958	....	....
Grand total.....	18,128	427,274	81,629	1,374

The Bavarian contingent, which has preserved a separate organization, although it stands under the absolute command of the Emperor like the rest of the army, numbers 2,214 officers and 50,224 men. The royal Saxon troops number 1,137 officers and 27,606 men; the Württemberg contingent, 773 officers and 18,815 men. The Prussian troops, in whose organization the contingents of the remaining states are entirely merged, number 14,004 officers and 330,629 men.

The strength of the army on the war footing, exclusive of the Landsturm and special bodies, is 35,427 officers, 1,456,677 rank and file, 312,731 horses, and 2,808 guns. They are divided for purposes of mobilization into the field troops, mustering 19,391 officers and 744,031 men; the depot troops, 4,796 officers and 296,614 men; and the garrison troops, 11,240 officers and 416,032 men. With the organization of the first class of the Landsturm reserve the war effective can be raised to nearly 2,000,-

\* The still-born are included in the returns of births and of deaths.

000 men. It is estimated that Germany can call into the field 2,500,000 armed men without calling out the last reserves. The empire is divided into seventeen military districts, each capable of mobilizing a complete corps. The guard regiments, recruited from Prussia and Alsace-Lorraine, are not attached to the territorial divisions.

In the remodeled system of fortifications there are 17 fortresses of the first class, with fortified camps, and 26 other fortresses, 10 of which are for coast-defense and 13 to guard the railroad approaches. The empire is divided into nine fortress districts: 1, Königsberg; 2, Dantsic; 3, Posen; 4, Berlin; 5, Mayence; 6, Metz; 7, Cologne; 8, Altona; 9, Munich. The fortresses of the first class, which serve as fortified camps, in the different districts, are the following: 1, Königsberg; 2, Dantsic and Thorn; 3, Posen and Neisse; 4, Küstrin, Magdeburg, and Spandau; 5, Mayence, Rastadt, Strasburg, and Ulm; 6, Metz; 7, Cologne and Metz; 8, Sonderburg-Duppel; 9, Ingolstadt. A wide circle of outer fortifications has been recently built around the fortresses of Strasburg and Metz. The forts at Thorn, Posen, Küstrin, and Mayence have also been enlarged. The forts for railroad protection and the districts in which they are situated are as follow: 1, Dirschau; 3, Glogau; 4, Königstein and Torgau; 6, Diedenhofen, Saarlouis, and Bitsch; 7, Düsseldorf and Wesel; 9, Garmersheim. The coast fortresses are: 1, Memel and Pillau; 2, Kolberg, Stralsund, and Schweinemunde; 8, Kiel, Travemünde, Elbe-mouth, Ems-mouth, Weser-mouth, Friedrichsort, and Wilhelmshaven. The remaining fortresses are: 1, Marienburg; 3, Glatz; 5, Neu-Breisach; 7, Ehrenbreitstein. A number of old fortresses have been abolished in the reconstruction of the system of defenses carried out since the last war.

The German navy consisted in 1882 of seven iron-clad frigates, five iron-clad corvettes, eleven iron-clad gunboats, with two more under construction, one monitor, fifty-eight other steamers, and four sailing-vessels. One additional iron-clad frigate and one iron-clad corvette, with six torpedo-boats, besides the fourteen now existing, will nearly complete the naval reform scheme adopted in 1873. Two of the torpedo-steamers of the German navy, the Zieten and the Ulan, are sea-going vessels of remarkable speed, calculated to be not less than twenty knots an hour; they are protected in their vulnerable parts with steel armor. The German navy is manned with 15,196 men and officered by one admiral, one major-general, one vice-admiral, five rear-admirals, thirty ship-captains, and fifty-five corvette-commanders. (See NAVIES OF EUROPE.)

**FINANCE.**—The revenues of the empire are derived from customs duties, the excise duties on malt, spirits, tobacco, etc., stamp-dues, the profits on the post and telegraphs, and certain other sources fixed by the Constitution, the

deficiency between the expenses and the receipts from these sources being made up by the matricular contributions, or quotas assessed on each state in proportion to its population. Bavaria, Würtemberg, and Baden receive the proceeds of the malt and liquor taxes, and Alsace-Lorraine applies the receipts from beer to its own administration, while Bavaria and Würtemberg maintain separate postal and telegraph establishments. In compensation these states must pay proportionately higher matricular quotas. The budget for 1880-'81 states the total revenue at 539,252,640 marks (1 mark = 23.8 cents), and the expenditure at the same amount. The revenue and expenditure for the year 1881-'82 are placed at 596,811,409 marks. The budget for 1882-'83, approved by the law of February 15th, states the total receipts as 610,632,707 marks. For the states forming the Zollverein the customs revenue is taken as 186,466,150 marks; the impost on beet-sugar as 47,421,460 marks; on salt, 36,709,570 marks; on tobacco, 11,029,240 marks; on spirits, 35,517,630 marks; and on malt, 15,111,170 marks, except in the states which levy the duties on the last two articles themselves. The imposts collected in the states not forming part of the Zollverein are taken as 6,843,060 marks, making the total revenue from customs and excise 339,098,280 marks. The gross receipts from the posts and telegraphs are given as 145,128,000 and the expenses 123,864,000 marks, making the net revenue 21,264,000 marks. The public railroads belonging to the empire are made to yield a net revenue of 12,686,400 marks out of 40,083,700 marks of total receipts. About 19,000,000 marks are derived from stamp-dues. The interest on the invalid fund is 30,129,567 marks, the interest on capital funds 3,062,953 marks; the surplus carried over from 1881-'82, 10,558,350 marks. A sum of not quite 50,000,000 marks, included in the receipts, comes from the funds and loans for the building of fortifications, railroads, and other extraordinary expenses. The matricular contributions amount to 103,684,369 marks, 52,249,733 marks being assessed upon Prussia; 20,278,807 marks upon Bavaria; 5,598,007 marks upon Saxony; 7,670,015 marks upon Würtemberg; 5,359,876 marks upon Baden; and 3,838,381 marks upon Alsace-Lorraine. The expenditures are estimated at 610,737,707 marks, divided into 531,829,228 marks of permanent and 78,908,479 of special expenses. The expenses are divided among the different departments as follow: Reichstag, 407,670 marks; Chancellor's office, 125,770 marks; foreign affairs and consulates, 6,676,775 marks permanent, and 183,800 marks special; Interior Department, permanent, 2,775,422 marks—special, 9,240,072 marks; post and telegraphs, special, 3,053,000 marks; printing-office, special, 15,000 marks; army, permanent, 242,493,325 marks—special, 28,033,931 marks; navy, permanent, 27,565,856 marks—special, 8,728,800 marks; administration of justice, 1,707,667



marks permanent, and 200,000 marks special; treasury, 86,317,566 marks permanent, and 3,595,825 marks special; office of railways, 303,150 marks; debt of the empire, 13,702,500 marks permanent, and 227,300 marks special; audit of accounts, 528,673 marks; administration of railways, 4,400,000 marks special; pensions, military, 18,266,829 marks; naval, 449,733 marks; civil, 378,725 marks; together, 19,095,287 marks; on account of the last war, 18,283 marks special; invalid fund, 30,129,567 marks permanent; deficit of 1880-'81, 12,062,468 marks special; capital investments, 9,150,000 marks special.

The debts of the empire, contracted since 1877, amounted on October 1, 1881, to 298,951,500 marks, to which 29,674,405 marks were added by the financial law of February 15, 1882. Besides the funded debt, all of which bears interest at four per cent, there were treasury notes outstanding on April 1st to the amount of 152,164,210. The empire possesses various funds greatly exceeding its obligations in amount. At the end of November, 1881, the invalid fund amounted to 534,428,028 marks, besides 459,400 Frankfort florins in securities, and 2,609,350 in silver; the fund for the construction of fortifications, to 51,103,709 marks, besides securities to the amount of £404,950 sterling, and silver to the amount of 547,851 marks; the fund for building a Parliament House, to 29,603,350 marks; and the war treasure to 120,000,000 marks.

**FOREIGN RELATIONS.**—The relations of Germany with Russia have been strained since the Berlin Treaty of 1878. Prince Gortchakoff made bitter complaints of the ingratitude of Germany in depriving him of the fruits of the Turkish victories after the moral support extended to the Germans by Russia in the French War. The antagonisms arising from the rival interests and jealousies of race of the Russians and Germans, whose fields of activity are contiguous from the Baltic to the Mediterranean, constitute a perpetual danger to the peace between the two nations. The entire aim of Prince Bismarck, the supreme director of foreign affairs in Germany, has been, since the consolidation of the empire, to prevent the formation of a Russo-French alliance against Germany. On this account he has repressed the ambition for one of the richest provinces of Russia, and for German extension southward. For the same object the Austro-German alliance was concluded in October, 1879. The treaty was to continue until October 15, 1884, and arrangements have already been made for its renewal. The visit of the Russian Minister of Foreign Affairs, De Giers, to Berlin and Varzin, was regarded as a sign of peace, as the extravagant utterances of General Skobelev and others, in the beginning of the year, were considered to be fraught with danger; but Prince Bismarck places his hopes only in the powerful union of interests which he is trying to bring about in Central Europe, and in the

continuation of peaceful relations between nations throughout the Continent.

**LEGISLATION.**—The first session of the fourth legislative period of the Reichstag opened ominously on the 17th of November, after a bitter electoral struggle. The Liberal factions, which had defeated the Government projects of social reform, returned victorious, with the indorsement of the country. Parliament was treated as though it were in disgrace. Instead of being opened by the Emperor, as usual, the Chancellor read the imperial address, in which the schemes of accident insurance and annuities for aged laborers, with state aid, were coupled with the obnoxious demand for a tobacco monopoly.

At the final elections of 1881, out of 9,090,381 possible votes—the competent electors forming 20·1 per cent of the population of the empire, 62·6 per cent of which belongs to the Evangelical Lutherans, and 35·9 to the Roman Catholics—5,301,784, or 58·6 per cent, were cast. Of the total number of legal votes 21·7 per cent were given to candidates of the Clerical, or Center, party; 15·2 per cent to German, or pure, Conservatives; 13·6 per cent to Progressists; 13·1 per cent to National Liberals; 8·8 per cent to candidates of the Liberal Union; 7·4 per cent to the Imperialists; 6·3 per cent to Social Democrats; 3·7 per cent to the Poles; 2·9 per cent to the Alsatians; 2·7 per cent to unattached Liberals; 2·3 per cent to the People's party; 1·8 per cent to Guelphs and Autonomists; 0·3 per cent to Danes. The elected candidates received 64·5 per cent of the total votes cast. The Parliament was divided into 76 Conservatives, comprising 49 German Conservatives, sitting on the Extreme Right, and 27 Free Conservatives, or German Imperialists, who formed the left wing of the Right Center; 107 in the Center, composed of the Clericals, with the Guelphs and the National Liberals or Benningsen party; 43 Secessionists, or Liberal Unionists, the party of Von Stauffenberg, Forckenbeck, Lasker, and Bamberger, devoted to free trade; 47 Progressists, led by Richter and Hänel; 68 Democrats of both shades, the Volkspartei, or Popularists, and the Social Democrats; 12 forming the Extreme Left; 15 Alsace-Lorrainers, 18 Poles, and 2 Danes, constituting the Particularists, who are opposed to the empire as now constituted; and 8 Savages, or Independents.

Bismarck's hardy determination to press the measures which he declared "postponed, not defeated," by the adverse votes of the Reichstag, after they had been expressly condemned at the polls, was understood, when the royal prerogative was suddenly intruded into the controversy.

The social reforms were put forward this time with particular emphasis as the Emperor's policy, as if to lure the Liberals into a constitutional controversy. Indignant at Bismarck's disregard of parliamentary usage, in urging his economical solecisms upon a majority which

had rejected them, they blamed him bitterly for shirking his responsibility, and shielding himself behind the name of the Emperor. On the 4th of January a manifesto was issued by the King, which dispelled the illusion of the Constitutionalists, that they were already living in a state in which the King reigns but does not rule. It declared that the Prussian Constitution (of 1850) transferred a portion of the law-giving powers to the Legislature, but left the King the full power of initiation and approval. The policy of the Government is the King's policy, although it must be represented by his ministers; his royal acts are his own, although the countersigning minister becomes responsible for them to the laws and the country. They express his will and pleasure, and should not be spoken of as emanating from the ministry, but from the King himself.

The Constitution of Prussia, the rescript declares, is the expression of the monarchical tradition of this country, whose development is based on the living and actual relations of its kings to the people. These relations, moreover, do not admit of being transferred to the ministers appointed by the King, for they attach to the person of the King. Their preservation, too, is a political necessity for Prussia. It is, therefore, my will that both in Prussia and in the legislative bodies of the empire, there may be no doubt left as to my own constitutional right, and that of my successors, to personally conduct the policy of my Government; and that the theory shall always be gainsaid that the inviolability of the King, which has always existed in Prussia, or the necessity of a responsible counter-signature of my government acts, deprives them of the character of royal and independent decisions.

In a passionate address in the Reichstag, Prince Bismarck said that the minister is a mere stop-gap, according to the Prussian Constitution, however ill that may accord with constitutional legends borrowed from other countries. It accords with Prussian traditions, for the kings of Prussia have always construed their duties as rulers seriously, in the spirit of Frederick the Great, who declared that he was the first servant of the Prussian state.

We know how our present ruler lives, and occupies his time from morning till night. It makes itself felt that with us in Prussia, within the Cabinet, the King commands, and the ministers, as long as they think they can support the responsibility, obey. If they can take the responsibility no longer, a change of ministers is not a difficult matter. We have an abundant variety of politicians of every sort in stock; and the King, unless he adopts some very eccentric policy, will easily find ministers to assume the responsibility for what his present ones may decline to put their names to. Nothing eccentric, however, is required of us; but in the deep and steady grooves in which the policy of Prussia in the German Empire is laid, his Majesty the King decides on the principles of the course to be taken; he decides how the Prussian representatives in the Federal Council are accordingly to be instructed; he decides that drafts, made accordingly, shall be laid before the Diet and the Reichstag; decides according to his own convictions, and the elaboration, the formal part of the matter, is the business of the ministers. The ministers may hold different opinions from his, and then a compromise is made. Constitutional government is made up of compromises; and a king who does not wish to dismiss a minister outright will make some concessions to him

which he would prefer not to make. Still oftener it happens that the ministers can not obtain the agreement of the King to a work or a document which they think right. Then the minister must make up his mind whether he shall drop the matter, or make a Cabinet question of it, or resign, or whether it would be better for the country and the service to make concessions to the royal will. The royal will it is which alone decides. The actual minister-president in Prussia is his Majesty the King. I can give no directions to my colleagues. I can only make requests, and write letters to them, which do not always convince. That is very exhausting, and on that account I do not always do it; but when I think that a thing ought to be done, and I can not carry it through, I apply to the actual chief of the Cabinet, the King. If I find no accord there, I give the matter up. If I do find it, then a royal command is given that it shall be done so and so, and it is done, or else there follows a Cabinet crisis, which is quietly got through with.

The rescript, besides the plain legal definition of the place of the King in the Constitution, which the theoretical subtleties of Liberal politicians had obscured, contained vague and somewhat startling warnings to officials not to oppose Government candidates at elections. As explained by Bismarck, the holders of political offices were declared liable to the forfeiture of their places under the disciplinary law, if they electioneered for the Opposition by spreading misrepresentations of the Government, or by exercising the influence or patronage of their office; and non-political officials, as well as political, were expected to feel restrained by their oath of office from engaging in active opposition at elections to the policy approved by the Emperor, though not to forego the liberty of ballot secured by the Constitution.

The Government was not ready to present its revised projects for accident insurance and the relief of infirm workmen. The clericals proffered their support for a scheme of labor reform which would protect the interests of religion and the family by restricting Sunday and female labor. In the academical discussions, Bismarck foreshadowed only moderate measures, but pleaded for the principle with unwonted power and passion. The Liberals were held up to scorn as a party of pure negation, able only to carp and criticise, who neither now, nor when they were in power, proposed any relief for the poor. The cause of labor reform was declared to be dear to the Emperor's heart. The King of Prussia was by tradition peculiarly the king of "the poor man." The "Manchester men" who opposed the reforms showed themselves heartless to the sufferings of the poor. The Government was undecided as to the forms which the measures of "practical Christianity" ought to take. Parliament had denied it the assistance of an Economic Council. Bismarck had changed his opinion regarding the administration of accident insurance, which he now thought should be placed on a corporative basis instead of under state management. Corporate societies of the laborers in the different trades might not only be intrusted with the control of the



proposed funds for accident insurance and the support of the superannuated, but could help in working out regulations to govern the length of the hours of labor, the employment of women, and Sunday labor, which would be better than the establishment of a normal working-day and general prohibitive laws. Factory inspection likewise would be more judiciously conducted under the supervision of such societies. The cost of securing shorter hours of labor and of the other contemplated improvements in the condition of the toilers would seem to be more than the industries could sustain, and would necessitate the extension of state aid. The Government requested counsel and instruction in the elaboration of the projects for realizing the desire of the Emperor, that "the defenseless in the state should gradually learn by practical experience that Government is not entirely forgetful of them, except when it needs money or calls upon them to bear arms, but that it thinks also of protecting and sustaining them, so that with their feeble powers they may not be trampled down in the great highway of life."

The session was not a barren one, notwithstanding the bitter conflict which was waged on high political and constitutional questions. The Government achieved a moral victory. Even the Liberals were caught in the socialistic current. The Liberal factions submitted conjointly an employers' liability bill which was intended to be stringent enough to remove the necessity for accident insurance. They did not even refuse a measure for the collection of statistics of trades and callings on which to base the social legislation of the "new era"; although they again struck the appropriation for the Economical Council out of the budget.

The resolution of Dr. Windthorst for the repeal of the law of 1874, attaching penalties to the unauthorized exercise of ecclesiastical offices, gave the opportunity for some shrewd campaigning on the part of the Liberals, who hastened to announce their willingness to modify the May laws in those portions which had led to religious scandals and privations, in order to thwart the prospective alliance between Bismarck and the Clericals. A large section voted for the resolution, which was carried by a two-thirds majority, disclaiming the authorship of the law, and insinuating that the most grievous of the Falk laws were forged as weapons by Bismarck for his unscrupulous methods of political warfare. They still affirmed, without defining, the general principles of the May laws, but declared themselves in favor of a truce in the *Kulturkampf*, although believing a permanent peace in the perpetual conflict between the state and the Roman hierarchy to be impossible. This particular law was used in the pursuit of the two bishops and in a score or so of other instances, but it had long been a dead letter. Its exercise was made discretionary with the Government by a parliamentary resolve in 1880.

A decided victory for the Chancellor's policy was gained by the passage of the measure for incorporating the city of Hamburg in the Customs Union. The policy of the absorption of the two Hanse towns has met with strong opposition on the part of the free-trade elements in the Reichstag, and intense reluctance in the cities themselves. According to the Constitution of the empire, the Hanse towns, Bremen and Hamburg, are to remain free ports until they petition to be taken into the Zollverein. This petition was wrung from the municipality of Hamburg by threats and promises. In fulfillment of the compact finally extorted by the extraordinary "pressure" of the Government, the Reichstag voted forty million marks as an imperial contribution to the expenses of the inclusion. The right of free entry is limited to a new quarter, to be built on the left bank of the Elbe. No one is allowed to reside in the limited free port, nor can it be connected with the rest of the city by bridges. In time, for the separation of the imports traffic of the free port from that of the Customs Union, in order to simplify the customs regulations, a canal is to be dug along the left side of the river which will cost from fifty to sixty million marks. The merchants of Hamburg would not have given way thus far to the importunities with which the old Free City has been assailed for half a century, to join its economical fortunes with the rest of Germany, if it had not felt that its hope lies more in the growing export trade of Germany, than in its own manufactures and maritime trade in the products of other lands, and that even its present commerce, which is seriously threatened by the competition of other cities, particularly of Antwerp, can be better preserved with the subventions and other favors expected from the Government and the co-operation of the German manufacturers, which are necessary for the transformation of the city and harbor to meet modern requirements. Yet they would not have acquiesced so soon if they had not felt the weight of the Government's displeasure, and were not moved by the threat of Bismarck to erect a rival Hamburg just outside the gates. In the limited free port they can still make up cargoes of foreign goods and carry on the great industries of rectifying foreign spirits, manufacturing foreign tobacco, etc. Among the various "ethical" advantages which are expected from the harmonizing of economic interests, the principal one is that the Hamburg commission-merchants will apply their talents more to selling German goods at home and abroad, relieving the manufacturers of the task of finding a market, and less to marketing foreign products in Germany.\*

\* The original foundation of Hamburg's prosperity was the northern trade, with Scandinavia, Finland, and the Russian North Sea provinces—a trade which it still possesses. But it acquired its important position in the world's commerce in the beginning of this century, after the opening of the South American ports, through the liberation of the Spanish colonies. The Hamburg ship-owners were obliged to carry English goods, for there were no German wares to export

Chief among the other positive results of the session was the agreement to the erection of a monumental Parliament building in Berlin. Among the treaties which were ratified—purely a formal act—was one affecting consular relations with Greece, one supplementary to the Danubian navigation convention, and an international convention regarding precautions for the extinction of the phylloxera.\*

The budget was voted with but slight alterations. It showed a surplus of between 18,000,000 and 19,000,000 marks. Eugen Richter carried a resolve in the last hours of the session crediting something over 10,000,000 marks of the surplus of 1881-'82 to the next year's budget. The Federal Council accepted the measure, which relieved Prussia from financial difficulty by reducing her matricular contributions. This shrewd manœuvre of the Liberal leader confused the plans of the Government by rendering unnecessary a loan of nearly 5,000,000 marks which had already been proposed in the Prussian Diet. The session was closed January 30th.

Although the Chancellor had spoken of the necessity of an extra session in the spring, when the Government projects for social reform would be ready, there was great surprise, since the regular session had passed off smoothly. The prospects for the Chancellor's economical plans had not improved, when the Emperor called the Reichstag together again on the 27th of April. The opening address stated, as the objects of the session, the initiation of social reforms, and the continuation of tax reforms. The first measure proposed was the laborers' accident-insurance bill. The change in the scheme by which the administration is to be intrusted to corporations and trade associations instead of to state officials was expected to win the approval of the Liberals and the Ultramontanes for the project, which was designed to secure the co-operation of the industrial associations and of the working-men's societies in preventing accidents, to localize the administration as much as possible, and on the other hand to distribute the financial burdens over the broadest possible field. The passage of the measure would necessitate a change in the existing poor-laws, and would entail the extension of the sick benefit provisions. A change in the factory laws was also announced in the direction of more efficient

regulations for public safety, order, and morality. The social projects were referred to commissions, in whose hands they remained during the autumn sittings. They will probably engross the attention of the Parliament in 1883, and give to the session its character.

The extra session was really called for the purpose of settling the question of a tobacco monopoly. In the royal address at the opening of the regular session the abolition of the burdensome direct taxes of the German states, with the local taxes which add to the burden, was described as an urgently needed reform in the tax system. This object could only be accomplished by raising the indirect taxes of the empire, so that the Federal Government could do without the matricular contributions, or pay over to the single states contributions which will enable them to reduce the state and municipal taxes. Tobacco was designated as the most suitable article of consumption with which to commence the readjustment. All parties were agreed as to the propriety of increasing the tobacco-tax, but, regarding the form of it, there were various opinions. The Federal Council approved the form of a government monopoly, and would only consider other projects when the impossibility of obtaining the agreement of the representative Assembly became manifest. Bismarck has pursued none of his other legislative projects with such energy and tenacity. A ceaseless agitation had been kept up by his organs of the press. The Strasburg public tobacco factory had been continued by the Government, and agencies were established in all large cities of Germany; but the people showed such repugnance to see the royal arms on the packages that the shopkeepers were ruined and the factory left without business. The Prussian Economical Council, selected by Bismarck himself, refused to approve the unpopular measure. The failure to secure an alliance with the Clericals, even at the price of the revocation of the May laws, sealed the fate of the measure. When Parliament refused to pass the monopoly bill in the regular session the extra session was called in order to make a last effort to secure the financial independence which the tobacco monopoly would give to the Government. The committee of the Reichstag reported against the monopoly, and when Bismarck arose and went over the arguments again in two long speeches, it was only, as he said, to accompany the monopoly project to the grave. The vote, taken June 7th, was 276 against, to 43 for the bill. Certain vexatious tariff regulations were repealed. Protective duties were demanded on such articles as honey, asbestos, and slate; but both free-traders and protectionists had agreed to a truce so as to let the tariff have a "fair trial." The session ended on June 16th with a simple adjournment, so that the unfinished business might be taken up in the regular session, which opened November 30th.

except linen. The intimate commercial relations which sprang up between the Hamburgers and British manufacturers, the employment of their capital in English enterprises, their preference for everything English, were a thorn in the side of the struggling German industrial interests which sprang up. The jealousies are not yet extinct, and no cordial relations exist between the Hamburg middle-men and the German manufacturers, whose stock complaint is that the exporters will not pay living prices, and that they are obliged to export on their own account; while the shipping-merchants aver that, when they give an order for some transatlantic place to a manufacturer, he will forestall them by sending goods there himself, and spoil the trade by competing with his own manufactures.

\* The disease has existed for some time on the Aar, where the vines originally affected have died out, and the parasite has reappeared in new centers of infection.



The deputies were again confronted with the rejected proposal of biennial budgets immediately upon reassembling. The accounts which were laid before the Parliament, approved by the Federal Council, contained the civil list for 1883-'84, besides that for 1882-'83. The budget debates in Germany are always confined to the business details, so the second appropriation was simply struck out, the Government mustering again only 43 Conservative supporters.

PRUSSIA.—The Prussian Ministry was composed in 1882 as follows: President, Prince Otto von Bismarck, Minister of Foreign Affairs and of Commerce; Vice-President, Von Puttkamer, Minister of the Interior; Minister of War, Von Kameke; of Public Works, Maybach; of Agriculture, Domains, and Forests, Dr. Lucius; of Justice, Dr. Friedberg; without portfolio, Von Bötticher; of Ecclesiastical Affairs, Von Gossler; of Finance, Scholz. The latter succeeded Bitter, who was dismissed on account of a difference which arose between him and his chief with reference to the projected reform of taxation. He persisted in the idea, which Bismarck had abandoned, of extending the reform to the field of direct tolls and fees, while separating the capitalized or funded revenues from the unfunded.

The Prussian budget never shows the fact of a surplus or a deficit, as the accounts are made to balance exactly, but in nearly every year of late there has been an excess of receipts over expenditures. The expenses for each year since the formation of the empire down to 1880 were as follow (1 mark = 23·8 cents): 561,176,820 marks in 1872; 630,130,400 marks in 1873; 695,097,700 marks in 1874; 694,484,900 marks in 1875; 808,072,700 marks in 1877 (fifteen months, owing to the change of the date of closing the fiscal accounts from December 31st to March 31st); 657,520,344 marks in 1878; 713,857,764 marks in 1879; 711,500,758 marks in 1880. The principal sources of revenue are direct taxes, the Government railways, customs and excise duties, and the contributions of the individual states. The income from the railroads, mines, and other state enterprises has largely increased in recent years, and promises to exceed the revenues from taxation. The budget for 1882-'83 shows gross receipts of 934,589,917 marks, and, deducting the costs of administration and working expenses, net receipts of 419,755,032 marks. The public debt amounted in 1882 to 1,975,687,248 marks, of which 1,357,897,238 marks were railroad loans; the provincial debts to 83,994,182 marks, of which 64,899,171 marks were for railroads; making a total public debt of 2,059,681,430 marks. The sinking-fund and interest charges for the year amounted to 109,489,348 marks.

Political action in Prussia determines, in a great measure, the political development of the empire. Prince Bismarck, exercising the initiative in both Governments, often takes the measures which he would carry for the empire

to the Prussian Legislature, or goes to the Reichstag with plans which he entertains for Prussia, when the prospect of carrying them directly is unfavorable. He sought in vain in 1882 to obtain recognition in the Prussian Landtag for the reform projects which he endeavored to carry out in the empire. The Catholic question, which was first broached in the Reichstag, belongs properly to Prussia, and must be settled in that arena. The Clericals were not disposed to enter into an alliance with Bismarck to enable him to strengthen the central power in the empire, and the ministerial rights and the royal prerogative in Prussia, unless their demands were fulfilled and made secure for the future. They saw a better prospect of regaining the rights of the Church through the parliamentary institutions which Bismarck wished to emasculate with their aid, than of bringing him to Canossa. All that he could be expected to give they saw would have to come in order to put an end to public disorders. The friendly attitude of the Liberals in the Reichstag encouraged them in their position.

The Prussian Landtag was opened January 14th with an address from the throne, read by the Vice-President of the ministry, von Puttkamer, which dwelt upon the favorable financial position of the monarchy and announced a reduction of taxes. At the same time, as in the preceding year, a new loan was proposed, this time for 5,000,000 marks. The nationalization of several private railroads and the construction of new lines was proposed, as well as a canal connecting the Rhine and Ruhr system with the Ems and the North Sea. The political schemes of the Chancellor occupied the first place in the programme by the renewed proposal of the bill providing for the application of any sums paid over by the Government of the empire as the proceeds of new or augmented taxes to the reduction of direct taxes and local dues. The lightening of the burden of the national schools by the abolition of school fees, and the increase of official salaries, were also designated as objects for the application of the prospective revenues. The Catholic question was met by a proposal to simply extend the law of 1880 beyond January 1st. This made the execution of some of the most objectionable of the Falk laws discretionary with the Government. The exercise of these discretionary powers had, in the language of the address, enabled the Government to restore to several Catholic dioceses a regular administration, and to relieve their pressing necessities in the matter of the cure of souls, and also to extend and facilitate the activity of the societies for tending the sick. "The friendly relations with the present head of the Catholic Church place us in a position," it was stated, "to resume diplomatic intercourse with the Roman Curia, which was required for the discharge of public business." The session commenced with favorable prospects for the Clericals and their

ultra-Conservative allies, who were warned by the gains of the Progressive and Liberal parties in the election of 1881 to secure the legislation they desired before another session. They were indignant at the proposal of Bismarck to continue the arbitrary powers granted him respecting the exercise of the May laws instead of repealing the unbearable statutes at once. Von Schlözer returned from the post of ambassador at Washington to take the embassy at the Papal Court, whither he departed on the 31st of January to win the assent of the Pope to the discretionary law. The provision for the support of the new embassy, as well as the other items of the budget, passed through without friction. The proposal for the extension of the discretionary exercise of the May laws was killed in committee. Windthorst moved a bill providing for the unrestricted dispensation of the sacraments and reading of mass. The successor to Puttkamer in the Ministry of Worship, Von Gossler, was not prepared to accept, but unwilling to oppose, the motion of the Clerical leader. He accordingly arranged with the Clerical party, and brought in as a revised form of the measure rejected by the committee, a bill which went almost as far as Windthorst's, and moreover provided for the restoration of the deposed bishops. It was passed over the votes of the Liberals, and signed by the King May 31st. After its enactment Bishop Herzog, of Breslau, took a bold stand on the question of mixed marriages, and the ecclesiastical authorities elsewhere showed a disposition to assert the old constitutional rights of the Church. This attitude prompted the ministry to postpone the recall of the recalcitrant bishops.\*

\* The modern conflict between church and state in Germany began with the Cologne difficulty regarding mixed marriages and the religious instruction of the children. The Curia had officially ignored the regulations introduced in Prussia in 1808; but, when these were extended over the newly-acquired western provinces in 1826, local difficulties arose. The Prussian monarchy, in return for having made the church a state establishment, again looked to Rome for the acceptance of the regulations. Leo XII died before Bunsen could obtain from him the desired concession. Pius VIII sent a brief which recognized mixed marriages, but was not satisfactory with regard to the religious training of the children. Gregory XVI asserted the rights of the Church more vigorously than his predecessors, commencing the campaign in Hanover. Yet he reissued this brief, which had been rejected by the Prussian Government, after making formal alterations. A convention was concluded with the bishops; but difficulties soon occurred, and representations were received from the Pope accusing the Prussian Government of evading their agreement and oppressing the Church. The hostility of the Archbishop of Cologne, and the quiescence of some of the other bishops to the Government, heightened the tension. There was danger of the Rhenish province being taken away and incorporated in Belgium, on account of the religious troubles. In 1887 the archbishop was imprisoned. In the Papal allocution which was called out by this act the chasm between the Church and the Government was laid bare. About the same time occurred an altercation with the Archbishop of Gnesen and Posen on the same subject of mixed marriages, which led to his imprisonment. In 1839 Arnould was chosen Bishop of Treves, without the approval of the Government, and therefore unusual. Diplomatic intercourse with the Curia almost ceased. On the accession of Friedrich Wilhelm IV an accommodation was achieved, after a year or two of negotiation. The Government had to concede every principle in order to re-establish peace and order, and to keep the determined Archbishop Droste, who was their own particular choice originally, away

From a petty revolt of the Progressists against the "reptile fund" the National Liberals held back. Action on the proposition to allow the Guelph fund to accumulate for the benefit of the mediatized royal house of Hanover was postponed on the motion of Von Benningsen, leader of the remnant of Bismarck's old party and Hanoverian deputy, who hinted that the Duke of Cumberland might before long recognize the empire, and with propriety claim the indemnity awarded to his family.\*

The bill providing for the abolition of the four lower grades of the income-tax and of school-fees, the subvention of municipalities, and the improvement of the salaries of civil servants, made contingent upon the adoption of the tobacco monopoly, was intended to meet the objection that the Reichstag was ignorant of the manner in which the revenues from the monopoly would be used. The bill was rejected on the second reading by every vote except the Government Conservatives. The nationalization of the railroads was approved. Except the new ecclesiastical law, this was the only result of the session, which closed May 11th.

The Liberal parties were disappointed in

from Cologne. The bishops were given powers which they had not possessed before; while the Government *placet* was to be construed as only the right of approval, not the right to nominate candidates to vacant sees, and direct communications were allowed between the Prussian bishops and the Curia. According to the new understanding, the hierarchy was to supervise the theological studies at Bonn and in the Cologne Seminary, and could proceed at will against the condemned Hermesian neology. The bishops were accorded full authority over the discipline of the clergy, and discretion to permit or refuse the celebration of mixed marriages. The result of the long conflict was therefore the abandonment of the claims of the state, a result which was embodied in the Prussian Constitution of 1850. In the contest against the Church, which was commenced in 1870, and was apparently triumphant in the enactment of the Falk laws, it was not merely prescriptive rights, fortified by the sentiment of the affected population, but plain provisions of the Constitution which were violated.

\* The fund was created by an act of February, 1868, in fulfillment of an agreement between King William and the de-throned King George, by which the latter was to receive the indemnity of 16,000,000 thalers for the loss of his sovereign rights, the capital to be retained in trust by the Prussian Government, and the interest to be paid in perpetuity to the heirs of the Brunswick-Lüneburg family. Count Bismarck was obliged to use all his powers of persuasion to overcome the opposition among the Liberals to the grant, who objected not only on account of the magnitude of the sum, but because the deposed King had not formally abdicated. By entering into the agreement, which was brought about through the mediation of the British Government, Bismarck argued that the exiled monarch had "in honor" renounced his claim to his dominions. Yet a few days after the vote was granted, the blind King made a public speech in which his royal rights were vehemently asserted. The Government promptly impounded the indemnity fund, which proceeding was approved by the Diet. The problem of what to do with the accruing interest was finally solved by placing it at the disposal of the Government as a secret-service fund, with the understanding that it was to be used in frustrating the intrigues of the Guelph faction. "There is nothing of the spy in me," said Bismarck; "but I think we deserve thanks if we follow evil reptiles into their hiding-places, to watch what they are doing." Hence the fund, which amounts to about 1,800,000 marks annually, came to be known as the "reptile fund." These moneys are supposed to have been used latterly in entertaining the semi-official organs, called sneeringly "of-ficious," which were in derision named the "reptile press." These mysterious journals have been very serviceable in working public opinion, and feeling the way for the Chancellor's designs, and are a stumbling-block to his political opponents.



their expectations by the result of the new elections to the House of Deputies on the 19th and 26th of October. The Progressists lost many seats to the Conservatives, while they gained almost as many from the moderate Liberals. The new Landtag was opened in person by the King on November 14th. The speech urged that, while the other features of the tax reform were awaiting the development of more enlightened opinions in the legislative assemblies, the relief of the poorer classes from the income-tax should be proceeded with immediately. The collection of this tax was stated to necessitate frequent legal executions and entail great distress. To supply the loss of revenue from the abolition of the four lowest grades of the class-tax, the imposition of license-taxes for the sale of beer, wine, spirits, and tobacco, was proposed. The Landtag showed little inclination to accept this new project of the Government, its opponents proposing instead the readjustment of the income-tax.

**BAVARIA.**—The liberal provisions of the Bavarian Constitution regarding change of domicile were not superseded upon the entrance into the empire. The monarchy retains also its post-office and telegraphs, and the separate organization of its army. The President of the Ministry is Dr. von Lutz. The ministry was retained by the King, although the Ultramontane majority in the Chamber in 1882 sought to displace it. Von Lutz showed a willingness to make some concessions to the majority, but held firmly to the interpretation of the ecclesiastical provisions in the organic law, which, since the *Kulturkampf*, has been made to conform to the construction put upon the analogous articles in the Prussian Constitution. The financial statement for the budget period of 1882 and 1883 shows 228,705,333 marks of gross receipts, and 137,718,537 of net receipts. The public debt, on the 1st of January, amounted to 1,341,078,131 marks. The Chamber of Deputies reduced the obligatory school period from seven to six years.

**SAXONY.**—The President of the Ministry is General von Fabrice. The Chambers celebrated on the 1st of September the fiftieth anniversary of the Constitution. The budget for 1882-'83 fixes the revenue and expenditure at 67,767,236 marks. Nearly two thirds of the receipts are from railroads, forests, etc. The debt stood, on January 1st, at 673,445,475 marks.

**WÜRTTEMBERG.**—The President of the Ministry is Dr. von Mittnacht. Elections to the Landtag took place on the 20th of December, in which the Conservative-National party of the ministry obtained a decisive victory over their opponents, the Democratic Volkspartei. The National-Liberal party was merged with the Conservative upon the entrance of its leader, Von Hölder, into the ministry in October, 1881. The budget for 1882-'83 fixes the receipts at 52,303,615 marks.

**ALSACE-LOREINE.**—This province of the

empire is administered under the immediate direction of the General Government. In virtue of the law of July 4, 1879, a lieutenant of the Emperor is placed over it, the administration of which is directed by a ministry, presided over by a secretary of state. The conciliatory intentions avowed since the appointment of Baron Manteuffel as Lieutenant-Governor have not diminished the opposition of the protesting party in the Reichsland. A bill which was introduced in the extra session of the Reichstag, to allow the use of French in deliberative bodies under special circumstances, was defeated in the November session through the influence of the Government, and by the new law the deliberations of the provincial committee must be public and in the German language. The budget for 1882-'83 places the total expenses at 46,830,713 marks. The revenues are derived from imposts on wine, beer, etc., the public forests, and to a less extent than in other states from land and other direct taxes. The gross receipts of the tobacco monopoly are stated at 5,688,000 marks, and the expenses at 4,631,562 marks.

**GREAT BRITAIN AND IRELAND,** a constitutional monarchy of Western Europe. The supreme legislative power resides in Parliament, which must be convoked annually. The prerogative of the crown, which the resistance of the feudal barons prevented from becoming as absolute as in Continental countries, was greatly curtailed in the conflicts with the princes of the Stuart dynasty. During the last three reigns little has remained of the royal authority but the forms. During the same period the hereditary senate of the Peers has been driven to practically relinquish its share of the legislative authority, while the basis of representation in the House of Commons, or elective assembly, has been considerably extended. By the Reform Bill of 1867-'68 the franchise was conferred upon all rate-payers and occupants of real estate of £10 annual value in the towns and cities, and £12 in the country. The executive authority and the initiative in legislation are virtually concentrated in the hands of the Prime Minister, who is appointed as the leader of the dominant party, and who selects his associates to preside over the different departments and to prepare with him the schemes of legislation to be brought forward in Parliament. The Queen, Victoria I, was born May 24, 1819, and succeeded her uncle, William IV, June 20, 1837. The heir-apparent is Albert Edward, born in 1841. The present House of Commons first met in April, 1880. It is the twenty-second since the Union, and the tenth of the reign of Victoria. Unless previously dissolved, it will last until 1887. The House of Commons consists of 187 members representing counties, 295 representing cities and boroughs, and 5 representing universities in England and Wales, together 487 members; 32 representing counties, 26 representing cities and burgh dis-

tricts, and 2 representing universities, together 60 members from Scotland; and 64 representing counties, 39 representing cities, and 2 representing the university, together 105, from Ireland; making 652 members altogether. There are 658 constituencies, but six have been disfranchised for bribery. At the beginning of the term the House was divided as to parties between 203 Conservatives and 286 Liberals from England, 8 Conservatives and 52 Liberals from Scotland, and 24 Conservatives, 19 Liberals, and 60 Home-Rulers from Ireland; together 235 Conservatives, 357 Liberals, and 60 Home-Rulers.

The House of Lords consisted in 1881 of 537 members, of whom 5 were peers of the blood royal, 2 archbishops, 21 dukes, 20 marquesses, 128 earls, 32 viscounts, 24 bishops, 261 barons, 16 Scottish representative peers, and 28 Irish representative peers. Only 12 of the peerages are older than the seventeenth century, and 341 are not older than the present century, 165 having been created during the reign of Queen Victoria.

The Prime Minister is William Ewart Gladstone. Upon forming his Ministry in 1880 he took the office of Chancellor of the Exchequer in addition to his regular duties as First Lord of the Treasury. After the close of the extra session in the autumn of 1882, the Cabinet was reconstituted. Lord Derby entered the Cabinet as Secretary for the Colonies, Lord Kimberley taking Lord Hartington's place in the India Office, and the latter Mr. Childers's place as Secretary of War, while Childers received the Chancellorship of the Exchequer, relinquished by Gladstone. Sir Charles Dilke obtained a seat in the Cabinet as President of the Local Government Board, Mr. Dodson receiving the Chancellorship of the Duchy of Lancaster.

**AREA AND POPULATION.**—The total population of the United Kingdom in 1881 was found at the census taken on April 4th to be 35,246,562, of whom 17,253,947 were males and 17,992,615 were females. The area and population of the separate divisions were as follow:

DIVISIONS.	Area in square miles.	Population, 1881.
England.....	50,938	24,608,891
Wales.....	7,387	1,359,895
Scotland.....	80,685	3,734,370
Ireland.....	81,874	5,159,889
Isle of Man.....	226	53,492
Channel Islands.....	74	87,731
Soldiers and sailors abroad.....		242,844
United Kingdom.....	120,879	35,246,562

The population of England increased from 15,002,443 in 1841 to 16,921,888 in 1851; 18,954,444 in 1861; and 21,495,131 in 1871. The increase between 1871 and 1881 was 1.35 per cent per annum. The population of Scotland increased from 2,620,184 in 1841 to 2,888,742 in 1851; 3,062,294 in 1861; 3,360,018 in 1871; and at the rate of 1.05 per cent per annum in the last census period. The population of Ire-

land decreased from 8,196,597 in 1841 to 6,574,271 in 1851; 5,798,967 in 1861; and 5,412,377 in 1871. The rate of decrease between 1871 and 1881 was 0.48 per cent. The density of population in 1881 was for the United Kingdom 291 to the square mile, being between that of Holland (320) and Italy (248), and exceeded only by Belgium and Holland among European countries. The density of population in England and Wales was 445 to the square mile, being inferior only to that of Belgium (486). The number of inhabitants to the square mile in Ireland was 161, being more than in Hungary (125) and Denmark (136) and less than in France (178) and Switzerland (178). The number to the square mile in Scotland was 121. England contained 53.6 per cent of the population of the United Kingdom in 1831 and 69.8 per cent in 1881; Scotland, 9.7 per cent in 1831 and 10.6 per cent in 1881; Ireland, 31.8 per cent in 1831 and 14.6 per cent in 1881.

The population of London proper in 1881 was 3,814,571; of the suburban districts, 949,741; total population of the metropolis, 4,764,312.

The average rate of increase in the last decade was 16.9 per cent.

The soil of Great Britain and Ireland is in fewer hands than that of any other country. The number of owners of land in the three kingdoms is returned as follows, the lands of the metropolis being excluded:

UNITED KINGDOM.	Number of owners below an acre.	Number of owners above an acre.	Total number of owners.
England and Wales.....	708,289	269,547	972,886
Scotland.....	113,005	19,225	132,230
Ireland.....	36,114	32,614	68,758
Grt. Britain and Ireland	852,408	321,386	1,173,824

The proportion of owners of property to the total number of inhabitants is 1 in 20 in England and Wales, 1 in 25 in Scotland, 1 in 79 in Ireland, and for the whole United Kingdom 1 in 24. The average quantity of land held by each owner is 33 acres, the average rental £102, in England; 143 acres, rental £141, in Scotland; 293 acres, rental £195, in Ireland; and 61 acres, rental £112, for the whole country.

The number of electors in 1879 was 2,999,229 in the United Kingdom, against 2,748,985 in 1874; in England and Wales, 2,459,999, against 2,245,108; in Scotland, 307,941, against 280,308; in Ireland, 231,289, against 223,569.

The proportion of male to female children born in England is 1,048 to 1,000. At about the age of ten years the two sexes become equal in numbers, while in the whole population the females outnumber the males in the ratio of 1,000 to 949. In the total population of England and Wales, numbering 25,968,286, there were in 1881 803,126 paupers. The number of persons convicted of crimes in 1880 was 11,214. The number of births in 1880 was



880,520; of deaths, 528,056; of marriages, 191,634.

In Scotland three fourths of the surface of the country consists of mountains, marshes, and other waste lands. Among the total population of 3,734,441, the number of males was 1,797,592; of females, 1,936,848. The number of registered paupers and their dependents in 1880 was 98,608; the number of convictions for crimes 2,046. The number of births in 1880 was 124,652; of deaths, 75,795; of marriages, 24,489. The population of the eight principal towns, containing together more than one third of the total population of the country, was as follows: Glasgow, 511,532; Edinburgh, 228,190; Dundee, 142,454; Aberdeen, 105,054; Greenock, 68,897; Leith, 61,168; Paisley, 55,642; Perth, 29,755.

Of the 5,159,839 inhabitants of Ireland, 2,522,804 were males and 2,637,035 females. The number of paupers reported in 1881 was 109,655; of convictions for crime, 2,383.

The emigration of 1881, and the origin and destination of the emigrants, were as follow:

EMIGRATION.	To the United States,	To British America,	To Australia colonies,	To other countries,	Total.
English .....	90,527	17,164	15,704	16,551	139,976
Scottish .....	18,288	3,182	2,433	2,973	26,826
Irish .....	67,339	3,566	4,545	759	76,200
Foreigners .....	129,701	10,619	1,410	2,621	144,351
Unknown .....	2,168	.....	1	2,962	5,131
Total, 1881 .....	307,973	34,561	24,093	25,887	392,514

**COLONIES.**—The colonial possessions of Great Britain cover about one seventh of the land-surface of the earth, and contain nearly one fourth of its population. They are divided into forty administrative divisions. The Dominion of Canada, Newfoundland, New South Wales, Victoria, Queensland, South Australia, New Zealand, Tasmania, and the Cape of Good Hope possess responsible government, making their own laws and administering their own government; the Bahamas, Bermudas, Leeward Islands, Windward Islands, Natal, Ceylon, and Western Australia possess representative institutions, but their legislation is more under the control of the home authorities, and the government is administered by crown officers; while the rest are governed entirely by the crown. The cost of the colonies to Great Britain was, in 1879-'80, about £2,338,252, more than half of which was expended upon the naval and military stations of Gibraltar, Malta, Cape Colony and Natal, Mauritius, Bermuda, St. Helena, Cyprus, and Hong-Kong.

The area and population of each of the colonies, dependencies, and occupied stations of the British Empire in Europe, Asia, Australia, Africa, and America, consisting in all of forty-nine, and embracing the Dominion of Canada, and the immense country of India with over two hundred and fifty million inhabitants, are presented in the following table:

COLONIES.	Square miles.	Population.
Heligoland.....	$\frac{1}{2}$	1,913
Gibraltar.....	124 $\frac{1}{2}$	18,881
Malta.....	124 $\frac{1}{2}$	154,892
Cyprus.....	3,707	186,084
Total Europe.....	8,839 $\frac{1}{2}$	361,270
India.....	908,350	252,541,210
Ceylon.....	24,702	2,688,540
Straits Settlements.....	1,350	423,854
Hong-Kong.....	82	160,402
Labuan.....	80	6,298
Nicobar Islands.....	654	5,500
Andaman Islands.....	2,503	14,500
North Borneo.....	22,009	150,000
Aden.....	7 $\frac{1}{2}$	22,707
Perim.....	4 $\frac{1}{2}$	.....
Total Asia*.....	959,677 $\frac{1}{2}$	255,962,541
New South Wales.....	309,175	751,468
Victoria.....	87,854	862,346
Queensland.....	667,615	213,525
South Australia.....	908,435	236,211
Western Australia.....	975,920	31,000
Tasmania.....	26,375	115,705
New Zealand.....	105,842	459,691
Feejee Islands.....	8,034	124,999
Rotumah.....	.....	2,500
Total Australasia†.....	3,083,770	2,877,440
Cape Colony.....	199,950	780,757
Basutoland.....	9,720	128,176
Griqualand, West.....	17,491	45,277
Transkei.....	15,573	409,944
Natal.....	18,750	413,167
Sierra Leone.....	1,000	60,546
Gambia.....	69	14,150
Gold Coast.....	15,000	408,070
Lagos.....	73	75,270
St. Helena.....	47	5,639
Mauritius.....	739	377,873
Ascension.....	84	27
Total Africa‡.....	278,446	2,717,816
Dominion of Canada.....	8,205,344	4,324,810
Newfoundland.....	42,734	179,509
Bermudas.....	19	13,948
Honduras.....	7,562	27,452
Bahamas.....	5,390	43,521
Turks Islands.....	9	4,732
Caiques Islands.....	213	1,878
Jamaica.....	4,193	580,804
Cayman Islands.....	225	2,400
Leeward Islands.....	706	119,546
Windward Islands.....	830	312,656
Trinidad.....	1,754	155,128
British Guiana.....	85,425	243,110
Falkland Islands.....	4,839	1,533
Total America.....	8,859,243	6,016,077
Total British possessions.....	7,684,970	267,935,144

The railroad mileage of the British Islands in 1881 was 18,180 miles, against 17,933 in 1880. The mileage in England and Wales was 12,810; in Scotland, 2,930; in Ireland, 2,440. The total cost of the railroads was reported as £745,519,000; the gross annual receipts £63,873,000; the net receipts £31,828,000.

The length of the telegraph lines belonging to the Government was about 26,000 miles; the length of wires 121,000 miles. The number of dispatches sent in 1881-'82 was 31,345,-

\* Not including the Kuria Muria Islands, Mosha, Kaman, and Keeling Islands, the total area of which is less than one hundred square miles.

† Not including the Chatham Islands, Norfolk Island, and the Islands of Auckland, Lord Howe, Caroline, Starbuck, Maiden, and Fanning. The natives of Australia, estimated at 55,000, and the Maoris of New Zealand, numbering 44,000, are not included.

‡ Not including Whale Bay, Tristan da Cunha, New Amsterdam, and St. Paul.

861. The gross receipts were £1,633,884; expenses, £1,305,006.

The number of post-offices in 1881 was 14,549. The number of letters delivered in the year 1881-'82 was 1,229,000,000: in England and Wales, 1,037,000,000; in Scotland, 110,000,000; in Ireland, 82,000,000. There were besides 135,000,000 postal-cards and 412,000,000

newspapers carried by the mails. The number of postal money-orders was 14,900,000, amounting to £23,471,000,000, besides 200,000 sent to foreign countries, and 500,000 received from abroad.

The total value of the exports and imports of Great Britain for the five years last reported was, in round numbers, as follows:

YEAR.	Imports.	Exports of British products.	Exports of foreign products.	Total exports.	Total commerce.
1881.....	£397,092,000	£234,023,000	£68,060,000	£297,088,000	£694,105,000
1880.....	411,230,000	223,060,000	63,354,000	286,414,000	697,644,000
1879.....	362,992,000	191,532,000	57,252,000	248,783,000	611,775,000
1878.....	368,771,000	192,349,000	52,685,000	245,484,000	614,255,000
1877.....	394,420,000	198,593,000	53,453,000	252,346,000	646,766,000

The declared value of the imports and exports of specie for four years was as follows:

YEAR.	Gold imports.	Gold exports.	Silver imports.	Silver exports.	Total imports.	Total exports.
1881.....	£9,968,000	£15,499,000	£6,901,000	£7,004,000	£16,864,000	£22,503,000
1880.....	9,455,000	11,829,000	6,799,000	7,061,000	16,254,000	18,890,000
1879.....	13,369,000	17,579,000	10,787,000	11,006,000	24,156,000	28,585,000
1878.....	20,371,000	14,969,000	11,552,000	11,718,000	32,423,000	26,687,000

The value of the exports of British products per head of the population was £6 14s. in 1881; £6 9s. 5d. in 1880; £5 12s. 2d. in 1879; £5 14s. 1d. in 1878; and £5 18s. 11d. in 1877. The value of imports per head was £11 7s. 4d. in 1881; £11 18s. 7d. in 1880; £10 12s. 7d. in 1879; £10 18s. 3d. in 1878; and £10 15s. 10d. in 1877.

Articles of consumption made up £187,349,000 of the total value of merchandise imports, and £10,633,000 of the exports of British products.

The largest articles of import are grain and flour, the principal part of which comes from the United States; raw cotton, chiefly from the United States; wool, chiefly from the Australian colonies; sugar, raw and refined; wood and timber; and tea. The leading exports are cotton manufactures, woollen manufactures, iron and steel, coal, linen manufactures, and machinery.

The aggregate tonnage of vessels engaged in foreign commerce entering British ports in 1881 was 28,519,015: 20,437,035 under the British flag, and 8,081,980 under foreign flags. In 1860 the aggregate tonnage was 12,172,785: 6,889,009 British, and 5,283,776 foreign. The aggregate tonnage cleared in 1881 was 29,430,530; 21,106,224 British, and 8,324,306 foreign. The tonnage of laden ships arriving was 23,224,708; departing, 26,336,693. The tonnage of arriving steamships was 19,268,327; 16,038,726 British, and 3,229,601 foreign. The aggregate tonnage of the coasting-trade was 40,364,392 for arriving, and 34,655,235 for departing vessels.

The total number of ships registered in the United Kingdom in 1881 was 24,830, of the aggregate tonnage of 6,692,000 tons, as compared with 25,185 ships of 6,575,000 tons in 1880. The number of steamers was 5,505 of 3,004,000 tons in 1881, against 5,247 of 2,724,-

000 tons in 1880. The number of sailing-vessels 19,325, of 3,688,000 tons, against 19,938, of 3,851,000 tons, in 1880. The number of ships registered in the colonies was 13,922, of 1,844,000 tons, of which 1,732, of 236,000 tons, were steamers. Of the shipping of the United Kingdom, 4,163 sailing-ships, of 2,785,000 tons, and 2,546 steamships, of 2,619,000 tons, are employed in ocean-commerce.

ARMY AND NAVY.—By the law of 1881, the duration of service in the army is fixed at twelve years, five active and seven in the reserve. The 109 regiments of infantry of the line and 131 regiments of militia, in most of which only one battalion exists, are united with the volunteers to form 68 territorial regiments, of from five to seven battalions, each with its recruiting depot. The first two battalions of each regiment are troops of the line. The battalions of the line take turns in the colonial service, each remaining twelve years, the individual soldiers being replaced after eight years of service. The effective of the line battalions is from 562 to 1,040 men in the United Kingdom, 915 in India, and 895 in the colonies. The militia, after two months of instruction, are only called out to drill for from four to eight weeks annually. In the army estimates for 1882-'83, the strength of the regular army is fixed at 10,595 officers and 183,900 men, together 194,495, with 23,584 horses; the regular army reserves at 500 officers and 35,600 men, together 36,100. The yeomanry cavalry and militia number 4,575 officers and 148,157 men, together 152,732, with 14,500 horses which they furnish themselves; the volunteers number 8,192 officers and 238,168 men, together 399,092. The strength of the native forces in India is given as 3,212 English officers and 117,670 native officers and men, together 120,882, with 21,870 horses, elephants, and oxen. The total strength of the imperial forces is ac-



cordingly 27,074 officers and 723,495 men, together 750,569, with 59,954 horses. In the regular army, mustering 194,495 officers and men, 16,618 are cavalry, 33,789 artillery, 5,703 engineers, 128,238 infantry, 2,475 in the colonial corps, and 7,672 in the departmental services. According to a parliamentary return, there were 5,738 English, 785 Scotch, and 1,386 Irish officers in the army in 1878, and of the rank and file 124,708 were of English, 14,235 of Scotch, and 39,121 of Irish birth. Nearly all the colonies maintain militia and volunteer organizations. Separate from the army but having a military organization, are the armed police of Ireland, numbering about 14,000 men. India has a native military police of 190,000 men, in which the superior commands are filled by Englishmen.

The navy, unlike the army, of which the government is vested in the crown, is a permanent establishment, governed according to a settled code, by the Board of Admiralty, which consists of five members. The first Lord of the Admiralty always has a seat in the Cabinet. The navy was composed in 1882 of 74 ironclads, including some not completed, about 300 other steam-vessels, and 120 sailing-ships. (See NAVIES OF EUROPE.)

The British navy is manned by 45,300 officers, engineers, seamen, boys, etc., and 12,400 marine troops, artillery and infantry, with their officers, besides 18,400 in the Royal Navy Reserve, and 3,550 volunteer artillery, making a total effective force of 79,650; 21,513 more are employed in construction.

FINANCES.—The finance accounts for 1881-'82 make the total revenue for the year ending March 31st, £85,822,282. The yield of the customs duties, which are confined to tobacco, spirits, tea, wine, raisins, coffee, chicory, cocoa, and some minor articles, is estimated at £19,-

278,000. The excise taxes produce £27,240,000, of which £23,522,922 comes from the excise duty on spirits and malt, £2,024,619 from the license taxes on brewers and dealers in beer, spirits, wine, tobacco, etc.; £1,562,239 from the licenses for carriages, dogs, hunting, male domestics, coats of arms, right of carrying weapons, and various professions; £12,260,000 from stamp duties on contracts, wills, successions and legacies, receipts, marine insurance, bills of exchange, banks, license certificates, patents, gold and silver manufactures, playing-cards, and proprietary medicines; £2,725,000 from the land and house taxes; £9,945,000 from the income-tax; £7,000,000 from the post-office; £1,630,000 from telegraphs; £380,000 from the domains; £1,219,262 interest on advances for local improvements and on Suez Canal shares; and £4,136,020 from other sources. The balance on hand April 1, 1881, was £5,923,661. Of the expenditures, £29,665,945 go to pay the interest on the public debt, the consolidated debt calling for £21,393,802; £1,664,438 for the civil list, courts of justice, and other charges on the consolidated fund; £16,419,038 for the civil service; £29,201,038 for military and naval expenses, of which £16,309,585 are for the army, £1,100,000 for the army on Indian account, £500,000 on account of the expedition to Afghanistan, £535,000 for wars in South Africa, and £10,756,453 for the navy, and £8,522,097 for the postal and other services; total, £85,472,556.

The total revenues raised for local administration in 1879-'80 were £63,046,664; £30,971,396 from direct taxes, £6,244,327 from indirect, £1,666,227 from public property, £3,396,806 contributions from the national Treasury, £15,103,882 by loans, and £5,664,026 of other receipts. The local expenditures in the three kingdoms were as follow:

LOCAL EXPENDITURES.	England.	Scotland.	Ireland.	Total.
Public charity .....	£8,851,844	£918,217	£1,060,748	£10,830,809
Municipalities, police, and public health .....	88,961,898	2,507,000	2,015,844	88,484,742
Other expenses .....	8,679,100	2,495,273	684,556	11,858,929
Total .....	£51,492,842	£5,920,490	£3,761,148	£61,174,480

FOREIGN RELATIONS.—At the close of the year the British expeditionary forces were still in Egypt. In a circular note, dated January 3d, Lord Granville announced the "desire" of her Majesty to retire them when the state of the country and the organization of the means to maintain the authority of the Khedive will permit. During the interval the position in which the British Government finds itself imposes the duty of giving counsel so as to make sure that the order of things to be established will have a "satisfactory character and possess the elements of stability and of progress." For the future regulation of the Suez Canal, he proposes an agreement among the powers that the canal should always be free for the passage of vessels; that in time of war naval vessels of a belligerent should be subject to a detention,

and should not be allowed to land troops or munitions of war; that no hostilities should take place in the canal or its environment, or anywhere in Egyptian waters, even when Turkey is one of the belligerents; but that the last two rules should not apply to measures necessary for the defense of Egypt. Another rule forbids the construction of fortifications on the canal or in its vicinity. The British minister speaks of a new scheme for the financial administration in the interest of the bondholders to be submitted later. He proposes to place foreigners on the same footing with Egyptians with respect to taxation. The army is to be reduced, and in compliance with the earnest wish of the Khedive will be commanded by English officers. For the maintenance of public order a separate body of police and gen-

darmes will be established. The request of the Egyptian Government for the abolition of the control is approved, its place to be taken by a financial adviser to the Khedive nominated by the Government of Great Britain. The reform of the administration of justice and the suppression of the slave-trade are to be urged upon the Khedive. The note foreshadows finally the "prudent introduction of representative institutions."

The reawakened desires for commercial expansion by force of arms caused the English to be unusually jealous of like propensities on the part of other nations. The operations of Italy in Assab Bay first excited their susceptibilities; but their eyes were turned most anxiously to the movements of France at Tonquin, on the Congo, and in Madagascar. France has long exercised an incipient protectorate over the parts of Madagascar visited by her traders, while English influence in the island has been mostly confined to that exercised over Queen Ranovolo by missionaries. The British public were prepared in advance to espouse a quarrel of the Malagassy Queen with the French Government; but upon the arrival of her embassy, which made the tour of the European courts, it was discovered that she could conduct her own diplomacy.

The commercial treaty with France, concluded in 1860, and several times renewed, expired the 1st of March. The new commercial treaty, on which Sir Charles Dilke and Gambetta worked for ten months, came to nothing at last. The French protectionists were determined to be delivered from subjection to Manchester, which was accomplished by substituting specific for *ad valorem* duties, since in the finer textiles English competition was not feared. Concessions in the amount of the specific duties were not acceptable to the British commissioners, because they would not materially alter the effect. England was willing to continue the Cobden treaty, or to abate the wine duties in order to secure one more favorable for her manufactures. Fiscal considerations stood in the way of offering France a fair equivalent for free access to her markets, for French wines and articles of luxury are taxed for revenue purposes. The exports from France to England have greatly exceeded the imports of British products under the treaty which the French refuse to continue.\*

LEGISLATION.—The session of Parliament opened February 7th. As the whole of the preceding session had been given up to Irish matters, the attention of Parliament was invited by the Ministry to the arrears of home legislation. As many as ten measures were announced in the Queen's speech. Three of these—the bankruptcy, corrupt practices, and river conservancy bills—had been brought down from the previous session. The others included such important subjects as local government, the organization of a municipal government for London, a revised criminal code, and a new patent law. But, through a series of mistakes and mischances, none of the measures enumerated in the royal message were carried except two Scotch bills, one amending the law of entail, and the other providing for the endowment of education. That important Government measures have expired in protracted discussions is no new thing; but that they should not even be introduced, that the main part of the ministerial programme should not be discussed at all, would have been deemed impossible before this session of derangements and surprises. It was not because great and unforeseen exigencies called away the attention of the House, nor because the Irish were more successfully obstructive. They were not, properly speaking, obstructive at all, although they contributed to the delay, as did all of the parties; and none contributed so much to make this, in the words of Gladstone, "a session of ruin and discomfiture" as did the members of the Government themselves.

The question of the year was the reform in parliamentary procedure. The new rules were to take precedence of all other measures. As framed by the Government, providing for the *clôture* by a bare majority, they furnished an issue between the two sides of the House, and both parties were girded for a close struggle. The Irish chapter was to be considered as closed. The address spoke of signs of improvement, of a diminution of intimidation, and a more efficacious administration of justice, giving promise that the operation of the land act, and preliminarily the judicious exercise of the powers of coercion, would bring about "the happy results which are so much to be desired." The debate on the address was prolonged eleven days. The Irish party arraigned the Government for administration of the protection act. The curt and contemptuous replies which they received enabled them the more forcibly to denounce the tyrannies of Forster's administration, to defend the motives of the imprisoned Land-Leaguers, to show the defects of the land law, to justify boycotting, and to unfurl the banners of home-rule as the only deliverance from misgovernment. Mr. Gladstone dumfounded the Conservatives and perplexed even the most advanced Liberals by hinting at the future consideration of "the wider question of a separate Legislature," and challenging the Home-Rulers to draw a line of

\* The general imports from Great Britain into France in 1875 amounted to 708,780,052 francs, in 1879 to 747,707,818 francs, and in 1880 to 721,465,519 francs; the general exports to Great Britain amounted to 1,149,183,464 francs in 1875, to 1,086,957,035 francs in 1879, and to 1,090,390,228 francs in 1880. The special commerce returns give 582,288,891 francs in 1878, 600,828,044 francs in 1879, and 601,861,156 francs in 1880, as the value of imports from Great Britain, against 919,488,895 francs of special exports to that country in 1878, 884,128,197 francs in 1879, and 845,468,215 francs in 1880. In the special commerce of 1880, wool imports from England figured for about 124,400,000 francs, woollen fabrics for 60,200,000 francs, coal for 59,100,000 francs, cotton manufactures for 29,200,000 francs, and silks for 19,400,000 francs. The chief French exports to Great Britain were: silks, 98,600,000 francs; woollens, 98,700,000 francs; refined sugar, 48,000,000 francs; wine, 72,100,000 francs; and butter, 60,400,000 francs.



demarkation between imperial and local interests. Meanwhile the House of Lords had appointed a select committee to inquire into the workings of the land act. Mr. Gladstone then suspended the reform of parliamentary procedure, to carry through a resolution condemning the inquiry as "tending to defeat the operation of the land act and injurious to the good government of Ireland." This retarded for weeks the serious work of the session. The budget, reports of the departments, and other business delayed action on the new rules of procedure; but when the House was approaching the point of a decision on the first rule, which embodied the principle of *clôture*, by a bare majority, the uncertain attitude of many Liberals betokened that the best chance of success was in delay. Irish matters were taken up and engrossed the attention of Parliament to the end of the session. The Government in the mean time recovered the political strength which it was losing in the field of legislation by engaging in the war with Egypt. (See DISCIPLINARY POWERS OF LEGISLATIVE ASSEMBLIES, etc.)

The composition of Parliament was ruffled at the outset by a renewal of the Bradlaugh question (see "Annual Cyclopædia" for 1881). Mr. Bradlaugh presented himself with the new members to take the oath. Sir Stafford Northcote again moved that he be not allowed to "go through the form of repeating the words of the oath," which was carried by a majority of 286 to 228, placing the junior member for Northampton in the same position in which he stood during the previous session. This time the Government opposed the motion, and Mr. Bradlaugh made a plea, in which he offered to take the Chiltern Hundreds and stand again if the House would make an affirmation law. Three weeks afterward his colleague, Labouchère, moved for the issue of a new writ of election for Northampton, but by a nearly unanimous vote the House refused to declare the seat vacant. Then Mr. Bradlaugh advanced to the table, drew out a copy of the New Testament, recited the oath, and signed the formula, which he passed to the Clerk. Ordered by the Speaker to withdraw below the bar, he did so, declaring that he had taken the oath according to law and would now take his seat. He accordingly turned about after just stepping outside and occupied a seat until he was again ordered out. The next day, during the adjourned debate on his case, while Sir Stafford Northcote's motion to render his position still more intolerable, by denying him entrance into the building, was under consideration, Mr. Bradlaugh took a seat within the House, from which he rose, though directed to withdraw, to assert his right to be heard as a sitting member, and then retired upon a repetition of the Speaker's order. Sir Stafford Northcote then made a motion of expulsion, which was carried by an overwhelming majority. The constituency of Northampton did not desert

their champion. A large vote was cast, and Bradlaugh came out a third time at the head of the poll. Without waiting for him to present himself, Sir Stafford Northcote moved to reject an amendment in favor of an optional affirmation law, to which the House agreed.

Several acts were passed relating to the details of public administration, some of them of especial significance. The conveyance of packages by the post-office, which has long been the practice on the Continent of Europe, but which in America is considered to be peculiarly a function of private enterprise, was authorized in the parcels-post bill. The maximum weight of postal packages is seven pounds. The charges for forwarding and delivery range from 3d. to 9d., according to weight. The numerous functions of the British post-office are further increased by an act adding to the business of the postal savings-banks that of providing old-age annuities, or life-insurance. Deposits made indifferently at any of the 6,700 post-offices opened for savings-bank business are applicable, according to previous acts, to the payment of debts and transfer of money all over the United Kingdom, and, when they have accumulated to a certain amount, they can be invested by the Post-Office authorities, at the desire of the depositor, in Government bonds. By the new law, the Post-Office undertakes the payment of deferred annuities and life-insurance policies; and money to meet the annual payments on these may be deposited at any time in any post-office, the excess drawing the usual small interest.

A measure which realizes free trade in land, for which the Radicals have vehemently agitated, was introduced in the House of Lords by Lord Cairns, the former Tory Chancellor, and passed the House of Commons without a debate. The settled-land bill, supplementing previous legislation on the subject, enables tenants for life to sell the estates under restrictions requiring the proceeds to be invested so as to secure the interests of the remainder-men. The moneys are placed in the custody of the trustees of the settlement, or of the court, but may be applied in any way the limited owner selects, and to his profit, so long as the interests of the heirs are not impaired. For the sale of the principal mansion and park, the consent of the trustees or the court is requisite.

The married women's property act completes the revolution of the common-law principle regarding the status of the *feme-covert*, by which her land passed into the possession of the husband for life, and her personality became his absolutely. The new act is clear and thorough. All property, of whatever kind, bequeathed to a married woman, or acquired by her own efforts, is placed beyond all control of the husband, and belongs as absolutely to her as though she were single; but she is made responsible for her debts incurred before or after marriage, must support her children if the husband is unable, and must support him,

to prevent his becoming a charge upon the public.

Parliament guarded against the appropriation of the invention of electric lighting by monopolies inimical to the public interest by a general law on the subject. The electric lighting bill reserves the right to the Board of Trade to impose regulations and conditions on companies licensed to supply the electric light, as to the limits and conditions of supply, safety, price, and with regard to public inspection. New conditions may be inserted when the progress of knowledge shows them to be desirable. The bill also provides for the expropriation of the works of any company after the lapse of fifteen years, if the local or municipal authorities find it advantageous to take the business into their own hands. The price must be the actual value of the plant at the time of purchase, to be determined by agreement, or by arbitration. If municipalities desire to establish public works for electric lighting originally, they are empowered to do so.

IRELAND.—The "new departure" in Ireland, which was announced in the beginning of May, was a reversal of the policy of repressing Irish opinion, and a condemnation of all the utterances of the Ministry since the breaking up of the Land League in the previous October. Earl Cowper resigned the vicereignty so as not to stand in the way of the new policy. He was replaced by Earl Spencer, who had been Lord Lieutenant twice before. As he retained his position as President of the Privy Council, he was the first ruler in Dublin Castle who had a seat in the Cabinet. His active duties as Privy Seal were transferred to Lord Carlingford, Minister without a portfolio. Mr. Forster stood out against a change of policy, and, after a protracted Cabinet meeting, resigned his post. The following day, May 2d, Mr. Gladstone announced to Parliament the release of the three imprisoned members of Parliament, Parnell, Dillon, and O'Kelly, without conditions or stipulations, the intended discharge of all the "suspects" not believed to be complicated in the commission of crimes, and the intention of the Government to take counsel with the Irish representatives on the amendment of the land act, and to rely on the ordinary law, fortified with some new enactments, after the lapse of the protection act.

The ground of the release of the imprisoned members was stated by the Prime Minister to have been information received by the Government that if the question of arrears was settled on the basis of a bill offered by Redmond, one of the Land-League members, they would "range themselves on the side of law and order." A bitter wrangle followed, in which the Conservatives and their new ally, the late Chief Secretary, asserted that Gladstone had made a secret compact with Parnell, and the Government and the Irish members angrily repudiated the charge. Before this question of fact was fairly opened, the hopes of

all who looked forward to peace and reconciliation with the Irish people were dashed by a political murder in Dublin, which was apparently the work of conspirators, whose purpose was to prevent the prospective reconciliation, and keep alive the animosities between the two countries. The successor to Forster in the Chief Secretaryship was Lord Frederick Cavendish, a representative of the Whig section of the party, but one who had betrayed no prejudices or convictions in Irish questions. He was only known as a diligent official, esteemed by the men of all parties for his genial qualities (see OBITUARIES). On May 6th, the day after his arrival in Ireland, while the new Secretary and Under-Secretary Burke (see OBITUARIES) were walking together in Phoenix Park, they were assassinated by four men, who were driven up rapidly in a jaunting-car. They leaped out, stabbed their victims several times with long knives, and drove away. The crime plunged the minds of the Irish representatives into a gloom of despair, and excited in the minds of many Englishmen a ferocious spirit of revenge. A bill for the prevention of crime, more stringent by far than the protection act, was introduced by the Home Secretary, Sir William Harcourt. The Irish party, assisted by Mr. Cowen and a few other English members, contested stubbornly the harsher enactments of this, the severest measure of repression since Lord Grey's coercion act. They openly resorted to obstructive tactics, but conducted them so artfully that no plain instance of obstruction could be singled out. On the 29th of June, when the bill had been twenty-three days in committee, Mr. Gladstone rallied his followers for an all-night sitting. The next morning, when Lyon Playfair, chairman of the committee, returned to the House, he proceeded to name Parnell and fifteen of his followers as guilty of systematic obstruction (see DISCIPLINARY POWER OF LEGISLATIVE ASSEMBLIES, etc.). The sixteen members were suspended *en bloc*, although it was shown that several of the members named were not then in the House, and others had been absent during the night. Mr. O'Donnell, who was understood to speak of the "infamy" of punishing him for obstruction when he was at home asleep, was suspended for two weeks. Later in the day nine other Irish members were named and suspended. By this illegitimate proceeding the bill was carried through committee, and the urgency rule was revived to prevent any further stoppage. George Otto Trevelyan, who succeeded the murdered Chief Secretary, vigorously urged the passage of the measure as one which would be welcomed by the Irish people.

The crimes bill was ostensibly directed against secret societies and illegal combinations, but its provisions were shaped to paralyze the Land League, to destroy the right of meeting and of newspaper discussion, and to make boycotting and resistance to eviction



penal. In districts which may be proclaimed by the Lord Lieutenant, trial by jury is abolished in political and agrarian cases. Those of greater magnitude are tried by a tribunal composed of three judges of the Supreme Bench selected by the Lord Lieutenant, whose verdict must be unanimous, and from which an appeal lies to the Court of Appeals for criminal cases, called the Court of Criminal Cases Reserved, composed of five judges, of whom a majority decide. Cases of a lower category, which embraces boycotting, intimidation, etc., are triable by a court composed of two stipendiary magistrates, which possesses unlimited judicial powers and summary jurisdiction. The police are armed with the power of search and arrest by day or night. The Government struck out the paragraph authorizing nocturnal domiciliary visits, but it was restored in a significant division in which the Whigs joined the Conservatives. The alien act was revived; and, contrary to the wish of the Government, the power to banish suspicious foreigners was extended to Great Britain. Intimidation (including boycotting), incitement to crime, secret conspiracies, and illegal assemblies, were defined as criminal offenses. A censorship of the press was established, with the right to prohibit the importation of foreign publications. The Irishmen opposed most strenuously the suspension of jury trial and the intimidation clauses, and one which punishes the districts in which crimes of murder and maiming are committed without detection, by levying compensation. Such districts are, moreover, burdened with the cost of maintaining an extra police force. It was the struggle over these provisions which resulted in the indignation against the Irish members. The system of a special commission of judges who decide on questions of fact as well as of law was modified by allowing the alternative of a change of venue and trial before a special panel. The bill authorizes the arrest and detention of witnesses, and allows judicial inquiries to be prosecuted while the suspected criminal is still at large, or after he has fled the country. The minor offenses over which summary jurisdiction is given to inferior magistrates, sitting in couples and appointed from the Castle, are punishable with six months' imprisonment, with or without hard labor. Any person found outside of his home between sunset and sunrise, or any stranger found in a proclaimed district, can be arrested, and if they fail to give satisfactory explanations can be committed to prison for six months. The prevention act remains in operation three years.

The "information," on the strength of which the Cabinet had ordered the release of the imprisoned members, Parnell produced after the Premier had refused to disclose it. It was contained in a letter written by Parnell to another Irish member, which was brought to the notice of the Ministers. This letter,

commonly alluded to as the "Treaty of Kilmainham," became the subject of scornful reproaches leveled against the Government. Parnell declared that the settlement of the arrears on the principle adopted in the bill afterward passed, together with the extension of the fair-rent clauses to lease-holders, the amendment of the tenure clauses, and alterations which would render the purchase clauses effective, would be regarded as a practical settlement of the land question, and would enable the Irish representatives "to co-operate cordially for the future with the Liberal party in forwarding Liberal principles." The latter clause of the declaration was omitted from the copy read by Parnell, who, on the challenge of the ex-Secretary, called upon his correspondent, Captain O'Shea, to read the entire letter, which he did from a copy furnished by Mr. Forster. The letter also expressed the confidence of Parnell and his colleagues, that if the arrears were wiped out the exertions which they would "be able to make strenuously and unremittingly would be effective in stopping outrages and intimidations of all kinds."

The remedial legislation to which the Government had pledged themselves was linked with the repressive measure. The arrears bill was introduced almost at the same time with the crimes bill, and promised the first place after the latter had been disposed of. It followed the lines of Redmond's bill, and relieved tenants who were unable to pay off the whole of the arrears of rent for the bad years. Starting from the abortive clause relating to arrears in the land act, but adopting the principle of "gift and compulsion" instead of the principle of "loan and voluntary arrangement," advocated by the Irish Liberals and Moderate Home-Rulers, the ministerial measure proposed to give either landlord or tenant power to apply to the Land Court, under certain conditions, for carrying out a composition with the aid of public funds. The conditions were, that the tenant should have satisfied the landlord as to the year's rent due for 1881, that he should prove his inability to pay the arrears, and that the holding should be under £30 rent, Griffith's valuation, subject to which the state would pay the landlord half the remaining arrears, not in any case exceeding a year's rent, the remainder to be wholly canceled. The Irish Church surplus was appropriated for the state contribution; in case it proved insufficient the excess was charged upon the Imperial Treasury. Prominent Liberals joined with the Conservatives in contending that farmers who possessed a valuable property in their tenant-right ought not to be relieved of their debts by a free gift from the state, and the extinguishment of the landlord's claims by legislative fiat. A provision was inserted that the commissioners "may, if they think it reasonable," take the tenant-right into account in estimating inability to pay. By an amendment tenants of hold-

ings above £30 and below £50 valuation were granted relief on the plan of state loans and voluntary agreement with the landlords. Another amendment provided for a system of state-aided emigration.

The Lords amended the act so as to require the consent of the landlord to the prescribed composition, and to enjoin the commissioners to count the value of the tenant-right as an asset in estimating the solvency of tenants. Gladstone refused to give up the principle of compulsion, but compromised the question of charging arrears upon the tenant-right, accepting the Duke of Abercorn's substitution of "shall" for "may" in the amendment, tacked on in the Commons with limitations as to time and amount, and with the qualification "so far as the commissioners think it reasonable." Lord Salisbury was determined to precipitate a crisis, but the Conservative Peers refused to follow him. The Ministers could have reassembled Parliament, and, while demanding the assent of the Upper House to the measure once more, could have dissolved with a "good cry" by announcing a new reform which they still hold in reserve. This is a county franchise bill, extending the borough suffrage to the rural population.

The Land League, as an organization, was destroyed by Forster's application of the rigors of the coercion laws. The force of the movement in the form which it had taken spent itself with the settlement of the arrears question. While Parliament was in debate over the arrears bill, Michael Davitt, who had been released from Portland Prison a few days after the enlargement of the "suspect" members, propounded a new settlement of the land question, which removed it, except so far as the principles already embodied in legislation would solve it, into the sphere of speculative politics. His solution was the "nationalization of the land,"\* a scheme deduced from the theories of Henry George, the American economist, who was at that time in Ireland as correspondent for the "Irish World." This New York weekly journal from the beginning of the land agitation has circulated widely in Ireland, clandestinely when its open sale was prevented by the police. It was the medium for

the appeals for pecuniary assistance to the American Irish, and its editor, Patrick Ford, acted as agent in the remission of large sums. Already powerful through its passionate advocacy of the aims of the Land League, and formerly of the revolutionary designs, and the subsequent constitutional agitation for the repeal of the Union, this Irish-American newspaper, which has always represented extreme views, became the organ of the Land League after the authorities had gagged the Irish press. The representative organ of Irish sentiment in America and the purveyor of American support, and swaying opinion in Ireland more strongly in the absence of other outspoken journals, the "Irish World"\* sometimes dictated, rather than voiced, the policy of the Irish leaders. This influential organ now embraced Davitt's scheme for realizing the ideas of the "abolition of landlordism" and "the land for the people." The Ladies' Land League had been, except the Prisoners' Aid Society, since the suppression of the Land League, the only outward symbol of the large organization which had rallied under its banner the entire population of three provinces, and the majority of the fourth. Mr. Forster had done all he dared to destroy the ladies' association. Their practical work of providing food and shelter for evicted families was prohibited, and gentlewomen were cast in jail for erecting huts for the roofless sufferers. These harsh measures only aided the high-spirited Irish ladies, under the leadership of Miss Anna Parnell, to keep in fresh remembrance the Land League and its aims. The Ladies' Land League also now declared in favor of Davitt's project. Parnell, with the other leaders, pointed out that the Irish people would have to be educated in entirely new ideas to relinquish their hopes of a peasant proprietary for this theoretical scheme, and that its realization would make them the serfs as well as the subjects of the "alien"

\* Davitt proposes to have the Imperial Government expropriate the landlords, indemnifying them by the payment of one half the former money value of the land, taking that to be their equitable share in the ownership, according to the principles of "conventional justice and prescriptive right." At twenty years' purchase of the present rental, this would be about £140,000,000. An annual revenue collected in Ireland of £7,000,000 would pay the interest at three per cent, and wipe out the principal in fifty years. The annual agricultural product of the country is now about £80,000,000 in crops, and £30,000,000 more in live-stock. Fully twenty-five per cent of the total is drained out of the country in the rents paid to the absentee landlords. Under the more favorable conditions which would result, the out-turn of vegetable products would be at least doubled. He proposes to have the state remain the universal landlord. A rent equal to ten per cent of the value of the annual agricultural yield would amply pay the entire costs of general and local government. Apart from this moderate rental there would be no taxes to pay by any class in the community, after the debt for the landlords' indemnity has been extinguished.

\* Rossa's "United Irishman," the organ of the "dynamite faction," was frequently quoted from in the House of Commons in justification of repression; the arguments based upon the extravagances of this sensational sheet were answered by the Irish representatives with contemptuous sarcasms. They declared that it found its readers chiefly among the Tory party, and that "O'Donovan Rossa was as necessary to Mr. Forster as Mr. Forster was to O'Donovan Rossa." They did not repudiate the "Irish World." The "Irish Nation," founded in the winter of 1881 by John Devoy, a well-known Fenian, is as revolutionary in its tendency as the "United Irishman," and much more ably and eloquently written. It reflects the most advanced doctrines of Irish nationalism, and condemns Davitt's land ideas, deeming that Ireland should gain her independence by physical force, but not undertake the task of reforming civil society. The "Irish World" was a vehicle for the teachings of German socialism before it took up Henry George's agrarian theories. It has always striven to harmonize its social theories with the doctrines of the Catholic Church. By means of the "Spread the Light Fund," which was collected in connection with the revolutionary "Skirmishing Fund," it has been circulated gratis extensively in Ireland. The Boston "Pilot," conducted by the accomplished John Boyle O'Reilly, is the most moderate of the Home-Rule and Land-League journals, and perhaps the ablest and most influential, having a circulation second to no other Catholic paper in America. It advertised a reward of \$5,000 for the detection of the assassins of Lord Frederick Cavendish and Mr. Burke. Its editor was formerly a participant in the attempted Fenian revolution, and is still a nationalist, but looks to Home Rule as the stepping-stone to independence.



Government from whose misrule they had fondly hoped to escape for ages. After their manful resistance to the crimes bill, they relaxed the intensity of their efforts, recognizing the need of Ireland for a repose from agitation in the fruition of the results already attained, especially the substantial benefits of the arrears bill which averted instant distress. The schism of Davitt was only one additional sign of the exhaustion of their mandate. The decisions of the Land Commissioners at the same time became less favorable to the tenants, the judgment in *Adams versus Dunseath* marking the turning-point.

On August 16th, E. Dwyer Gray, High-Sheriff of Dublin and member of Parliament, was sentenced to three months' imprisonment, by Justice Lawson, for contempt of court. The offense consisted in the publication of a letter in the influential "*Freeman's Journal*," of which he was the responsible editor, charging the jurors in a political murder trial with intoxication, and of an editorial comment calling for an investigation. Several witnesses testified to the misconduct of which the jury was accused, when an inquiry was held later. The arrest of Mr. Gray provoked an outburst of indignation throughout Ireland, and was denounced by a portion of the Liberal press in England; and when the sentence had half expired, the judge made repairs for the odium his hasty act had brought upon the Government by releasing him again.

On the 22d of March, Queen Victoria, while passing from a railway-train into her carriage, at Windsor, was again subjected to one of those attempts or feints to assassinate her, seven of which in all it has been her strange fate to experience.\* It is, perhaps, because no precautions are thought necessary to protect the person of a constitutional sovereign whom no one can have any motive in wishing dead, that Victoria has been set upon so many times by crack-brained desperadoes. The last assailant was a demented person named Roderick Maclean, who had been a clerk. His trial for high-treason took place with much pomp and circumstance on April 19th. A single day was sufficient to establish his insanity in the minds of the jury, and he was acquitted on that ground.

The youngest of the royal princes, Leopold, Duke of Albany, was married April 27th, to the Princess Helen, daughter of the reigning Prince of Waldeck and Pyrmont, and sister to the Queen of the Netherlands. The usual grant of £10,000 a year in addition to the annuity of £15,000 voted to the younger sons of

the Queen upon coming to age was opposed by a radical faction in the House of Commons, of which Mr. Labouchere was this time the spokesman. A working-class member, Mr. Storey, created an unpleasant sensation by repeating, in direct terms, the arguments which are familiar to the democratic classes outside, against the cost of royalty, and of sinecures provided in the royal household and in the state departments for members of the aristocracy.

GREECE, a kingdom of Southern Europe. The present Constitution was elaborated by a Constituent Assembly in 1864. The legislative power is exercised by a single Chamber of Deputies elected for four years by direct vote. George I, King of the Hellenes, is the second son of the King of Denmark, born December 24, 1845. He was offered the crown by the National Assembly in accordance with a protocol providing for the annexation of the Ionian Isles, signed June 5, 1863, at London, by the three protecting powers, France, England, and Russia, and began his reign October 31st of that year.

The Ministry, which was formed March 15, 1882, is composed as follows: Tricoupis, President of the Council and Minister for Foreign Affairs, also of the Interior *ad interim*; Rallis, Minister of Justice; Kalligas, of Finance; Lombarδος, of Worship; Karaschakis, of War; and Rufos, of Marine.

AREA AND POPULATION.—The population, according to the census of 1879, was 1,679,470, of which number 880,952 were males and 798,518 females. The area was 51,319 square kilometres. The new territory in Epirus and Thessaly, acquired by the convention of May 24, 1881, has an area of 13,369 square kilometres and a population of 299,958 persons, making the total area of the Hellenic kingdom 64,688 square kilometres, or 24,880 square miles, and the total population 1,979,423. Of the population given in the census returns of 1879, 20,523 were soldiers and seamen, and 5,180 sailors abroad. The rest were divided as to religion into 1,635,698 Greek Orthodox, 14,677 other Christians, 2,652 Israelites, and 740 of other faiths. The number of foreigners residing in Greece was 31,969, of whom 23,133 were Ottoman subjects, 3,104 Italians, 2,187 English, and 534 French. The population of the principal towns was as follows: Athens, 63,374; Patras, 25,494; Hermonopolis, 21,245; Piræa, 21,055; Corfu, 16,515; Zante, 16,250; and Tripoli, 10,057. The number of marriages in 1878 was 8,603, births 44,921, and deaths 30,588, not including still-born; excess of births, 14,333. The population has increased since 1870 at the annual rate of 1.69 per cent. The Albanian race forms a large part of the population, furnishing the greatest number of cultivators, and a large and active section of the maritime population.

The special commerce in 1875 amounted to 114,486,000 drachmas of imports (about \$20,-

\* The first and most determined attempt on the Queen's life was made by Edward Oxford in 1840. In 1842 John Francis fired a pistol at her, and later in the same year Bean took aim at her, with a pistol, but did not succeed in discharging the weapon. In 1849 an Irish bricklayer named Hamilton fired a pistol at her, but it was charged with powder only. In 1850 an ex-lieutenant of hussars struck the Queen with a cane. In 1872 a boy thrust before her a petition for the release of Fenian prisoners, and with the other hand presented an unloaded pistol.

000,000), the exports to 75,764,000 drachmas (about \$13,000,000). The following were the principal imports: cereals, 28,851,000 drachmas; manufactures, 23,531,000; hides, 9,760,000; sugar, 5,546,000; wood, 5,297,000; iron, 3,358,000; cattle, 2,959,000; salted meats, 2,913,000; coal, 2,659,000; coffee, 2,411,000; rice, 1,941,000; sulphur, 1,851,000. The chief articles of export were the following: Zante raisins, or dried currants, 37,813,000 drachmas; olive-oil, 12,933,000; hides, 5,274,000; lead, 4,214,000; figs, 4,009,000; gall-nuts, 1,749,000; wines, 1,197,000; tobacco, 1,178,000; cotton, 971,000; silk, 964,000; soap, 856,000. The following table shows the extent of the trade with different countries:

COUNTRIES.	Imports.	Exports.
	Drachmas.	Drachmas.
Great Britain .....	31,291	40,584
Turkey .....	28,011	7,546
Austria .....	15,868	9,887
Russia .....	15,331	4,882
France .....	18,770	2,542
Italy .....	6,856	8,348
Other countries .....	3,364	6,975
Total, 1875 .....	114,486	75,764

The number of vessels entering Greek ports in 1875 was 10,089, of 1,783,180 tons, engaged in foreign commerce, and 63,465, of 2,210,968 tons, in the coasting-trade. The merchant navy numbered 5,437 vessels, of 262,032 tons, employing 26,760 seamen, including 4,303 vessels of less than 60 tons, and 27 steamers aggregating 8,241 tons.

**ARMY AND NAVY.**—By the law of 1879 every able-bodied man of the age of twenty-one or over is required to serve three years in the active army, six in the reserve, and ten in the militia. The strength of the army on the peace footing was fixed at 24,076, and on the war footing at 35,188 men. The force provided for in the budget for 1879 was 14,061 of all arms. By the royal decree of January 8, 1881, the effective was raised to 82,077 men. After the evacuation of the ceded provinces by Turkey, it was reduced to 27,500 men, by the decree of August 31, 1881, but the enlarged organization was preserved.

The fleet consisted in 1880 of fifteen vessels, two of which were small iron-clad turret-ships carrying 12-ton guns, two were steam-corvettes, and six gunboats. There were added in 1881 two wood-sheathed iron gunboats and an efficient torpedo service.

**FINANCES.**—The budget for 1880 was increased by extraordinary votes from 52,655,455 to 105,056,618 drachmas. (Greece belongs to the Monetary League, the coined drachmas being identical with francs; but they have been driven out by an inconvertible paper currency, which is at a discount, usually about 10 per cent.) The war budget was increased from 11,100,586 to 54,280,101 drachmas, and the navy budget from 2,111,230 to 11,861,879. There was, consequently, a deficit which, on the basis of the budget of receipts,

amounts to 58,368,761 drachmas. The budget for 1881 places the total revenue at 49,051,560 drachmas, and the expenditures at 124,155,139, leaving a deficit of 75,103,579 drachmas. The military expenditures are 71,823,580 drachmas, the naval expenditures 5,282,680 drachmas. The domestic debt requires 19,751,000, the foreign debt 1,272,000 drachmas. There were 8,800,000 drachmas voted for the construction of roads. Of the estimated revenue, 10,596,000 drachmas are derived from direct taxes, 6,011,000 coming from the land-tax and tithes, 1,900,000 from a tax on live-stock, 1,300,000 from licenses, and the rest from a house-tax, a tax of 3 per cent on joint-stock companies, and one on pastures. The indirect taxes yield 24,800,000 drachmas, of which 18,620,000 come from customs, and 5,300,000 from stamps. The revenue from the post-office and telegraphs is 1,350,000; from the domains and public property, 2,780,360; from sales of public property, 4,128,000 drachmas. Receipts of arrears are estimated at 3,000,000 drachmas.

The public debt in March, 1881, amounted to 490,407,309 drachmas. The foreign debt was made up as follows:

FOREIGN LOANS.	Drachmas.
Loans of 1824 and 1825, compromised in 1878. . . . .	26,462,326
Loan of 1832, 60,000,000 francs, guaranteed by England, France, and Russia. . . . .	98,457,458
Indemnity to heirs of King Otho. . . . .	8,751,792
Loan of 1879, 60,000,000 francs. . . . .	62,543,600
Loan of 1881, 124,000,000 francs. . . . .	134,000,000
Total foreign debt. . . . .	820,215,176

The domestic debt of 170,192,133 drachmas was contracted since 1862, except 18,000,000 drachmas given as indemnity to the inhabitants of Hydra, Spezzia, and other isles, for sacrifices in the revolution. Loans amounting to 119,980,000 drachmas were negotiated with a syndicate of French and Greek bankers in 1880 and 1881, to provide for a probable war with Turkey, of which something over 80,000,000 drachmas had been raised at the end of March.

**POLITICS.**—Politics in Greece have heretofore been of a personal character, hingering upon the rivalries and coalitions between the leaders of factions which were attached to their chiefs from personal considerations. Debauchery of the public service, nepotism, bribery and speculation were the inevitable concomitants of this low stage of political development. The accession of Tricoupis to power in March was the result of a national revolt against the old methods. The educated youth aspiring to better ideals, the more intellectual and patriotic elements, under the leadership of Tricoupis, Lombardos, Kehaya, and Petmezas, first organized a reform party in 1870. The late Prime Minister, Coumoundouros, was a skillful political tactician, not without claims to statesmanship; but the scandals which occurred during his ministry were no longer condoned, and his influence had greatly declined long before his retirement. The Opposition dictated the foreign policy of the late



Government, and insisted on the extreme pretensions of Greece in the boundary dispute with Turkey. Coumoundouros sacrificed the remainder of his popularity by breaking his promises during the vacation of the Legislature, in yielding more to the pressure of the powers than the temper of the country would suffer. He used the patronage and influence of the Government in the January elections to the fullest extent, in order to preserve his position; but the Opposition secured a majority of 60 in a House of 245, though the pressure used by the Government resulted in the invalidation of twelve candidates returned on the Government side. The resignation of Coumoundouros depended only on his choice as to the time and manner. When the Chamber met at the end of January, the King's speech was received in absolute silence. In March Coumoundouros took the occasion of a defeat in the election of the Speaker to resign, and Tricoupis formed his Cabinet.

**TURKISH BOUNDARY.**—The new Prime Minister was less disposed than his predecessor to agree to any compromise of the disputes with Turkey, and insisted on the fulfillment of the final award of the Delimitation Commission. The Turks still held three places which lay within the Greek boundary drawn by the commission in accordance with the terms of the Treaty of Berlin. These were the strategic points which the Porte represented to be invaluable for the defense of the Turkish territory, but which were of still greater defensive value to Greece. The points retained by Turkey were Karalik Dervend, the point on the coast of Thessaly where the boundary was to begin, Kotzoukhero, or Zarcos, and Kritzovalli. At Nezeros, Analipsis, or in Turkish Godaman, the Turkish Government also desired a variation of the boundary; but it had evacuated this point with the rest of the territory the preceding year. The Greeks finally concluded that the only way to obtain the disputed points was by the means which were successful in obtaining the award. A collision between the military of the two nations was threatened for some weeks before, finally, August 27th, the Greeks marched into Zorbas, a place near Karalik Dervend, lying within the awarded boundary, and had a pitched battle with the Turkish garrison. Fighting was resumed the next day. Skirmishes took place at other points. Both governments concentrated troops on the frontier, the Greeks collecting at once an army of over 10,000 men on the spot. There were 400 or 500 killed on both sides in the engagements. Then the powers took cognizance of the question, which entered, upon an armistice being arranged, into the diplomatic phase. Tricoupis dispatched a truculent circular to the powers. An informal conference of the ambassadors was held at Constantinople, on September 24th. The efforts of the powers were directed to obtaining a compromise. The Porte offered to give up

the three positions it still held in consideration of the retrocession of Nezeros. Tricoupis kept up his menacing attitude. Finally, the Porte gave way, and yielded up the disputed districts to the Greeks.

Greece has strong motives to assert herself in the Eastern question, and put forward her traditional claims upon Europe, however inconvenient they may be in the momentary diplomatic situation. There are good reasons why these demands should be accompanied by a movement for the purification of Greek politics. In the beginning of the century Greece was treated as the natural heir to the "sick man." The Roumanians, Bulgarians, Albanians, and all the rayas of the Turkish Empire were then dominated by Greek thought, called themselves Greeks, and partook of the aspirations for the establishment of the Byzantine Empire. The political incapacity and corruption displayed by the Hellenes after they obtained their independence, and the gradual development of national aspirations among the Roumanians and Bulgarians, encouraged by the Russians and often by the Ottomans, narrowed the prospects of Greece. The ecclesiastical separation of Bulgaria from the Phanars, and the bestowal of self-government on the two divisions of Bulgaria, have finally brought the Hellenes to a point where they must either display extraordinary vigor and virtue to preserve their succession to Byzantium, or sink forever into the position of a third-rate power.

**GREGORIAN CALENDAR.** The 15th of October, 1882, was the tercentenary of the abandonment of the Julian Calendar, and the introduction of the calendar named after Pope Gregory XIII. It seems fitting, therefore, in noting the events of the year, to make this the occasion of recalling the main features of these systems of time-computation. The history and origin of both calendars are worth looking into, as being of common interest to all civilized peoples. Both the Julian and Gregorian systems have their roots in times far older than the eras of their commencement. The Julian can not be considered apart from the earlier Roman calendar or calendars; the Gregorian is not only based, as to the solar year, upon the Julian, but borrows its lunar calendar from the system of the Greeks Meton and Calippus. But, before entering upon a comparison of these, it is desirable to obtain a clear idea of what we mean by a calendar. The scientific sense of the word (in which we here use it) is not affected by the starting-point whence it begins, whether Jewish, Christian, Mohammedan, or any other; properly it denotes any one of the modes in which time is divided by the different peoples of the earth—in short, the punctuation of time.

It is clear that time can be punctuated both naturally—i. e., in conformity with celestial phenomena—and artificially. There is nothing which would absolutely prevent the framing of



a calendar regulated by the relative positions of the earth and any one of the planets; but, of course, no one would think of calculating time by the motions of any other heavenly body than the sun and moon. The year, therefore, the principal division of every calendar, is either solar or lunar, or a compromise between both. Our civil year is an example of the first. The length of our civil month has now no reference to the duration of the moon's revolution round the earth. It is purely a matter of convenience, a division of the 365 days of the solar year into twelve periods, as nearly equal as possible. The Mohammedan year, on the other hand, is entirely lunar. Its twelve lunations only amount, on the average, to 354 days, 8 hours, 48 minutes, so that it falls short of the solar year by 10½ days, and consequently retrogrades through all the seasons in about thirty-four years. But even the lunar year, in its origin, was luni-solar, for it was always probably a rude attempt to punctuate the solar year by lunar divisions. Of the luni-solar the Jewish year is an example. Like the Mohammedan, it consists of twelve lunar months, but by means of intercalation it is brought every nineteen years into renewed correspondence with the solar year. Besides the solar year, the lunar month and the astronomical day are the other natural divisions of time. The conventional divisions are the week, the civil day, hour, minute, and second. The week of seven days is one among other methods of approximately dividing the month. Its origin is not very clear. The seven-day week, it is true, was widely known by Greeks and Romans, yet for the most part it was used as a measure of time by astrologers, Chaldean and Egyptian. The planetary names for each day of the week came to the Romans (probably before the Christian era) from Alexandria, as an astrological not religious institute. According to this, each of the twenty-four hours of the day, beginning at sunrise, was assigned to one of the seven "planets," taken in the then received order, Saturn, Jupiter, Mars, Sun, Mercury, Venus, Moon, continued without interruption from day to day.\* The Teutonic races, though borrowing the week from the Romans, adopted in place of Latin names of deities those with which they were more familiar, as Tiw, Woden, Thor, Fraya; the other days' names were simply translations, as Sun, Moon, Saturn. Among the early Romans the mode of dividing the month was cumbrous in the extreme, and it seems surprising that such a system as that of calends, nones, and ides, should have held its place so long as it did. The Greeks divided their months into decades of days; and the decade, too, was strongly urged for adoption in the calendar framed at the time of the French Revolution, so as to have ten months instead of twelve in the year. The more natural division, however,

into lunar months proved too convenient to be changed.

Above, the Christian in comparison with the Jewish and Mohammedan calendars has been spoken of; but there is yet a noticeable point to be mentioned. It is, that the Christians alone have two calendars, a purely solar and a luni-solar, a civil and an ecclesiastical, existing side by side. The Gregorian civil calendar is the direct bequest of the Romans, modified in a few respects, but still preserving the features of its progenitor. Passing by the traditional calendars of Romulus and Numa, it is tolerably certain that, until the decemvirs, who threw the calendar into hopeless confusion by a clumsy attempt to introduce Greek methods of calculating the year, the Roman year was exclusively lunar. The early Roman calendar-makers seem to have known of the nineteen years' cycle,\* and the decemvirs employed it by instituting a luni-solar year, supplementing the lunar with intercalations. They bungled, however, in their calculations, and they lengthened or shortened the intercalations, whenever they chose, so as to affect the time of the elections, in the interest of the aristocratic party. Hence, when Julius Cæsar took the matter in hand (in b. c. 46), he found the year in a state of chaos; and, in order to make things straight, he made the "last year of confusion" to consist of no less than 445 days, whereby he was enabled to start fair and square on his own system.

The first Julian year began January 1st, b. c. 45. It was purely solar, consisting of 365 days, with an additional day every fourth year, thus making the average length of the year 365 days, 6 hours. This period was divided into twelve parts, called months as heretofore. In Cæsar's arrangement the months had 31 and 30 days alternately, except February, which had 29 days in common years and 30 in leap-years. Augustus Cæsar, however, meddled with this arrangement; for, being resolved to have place in the calendar, he had the month Sextilis named after himself (just as Julius Cæsar had named Quintilis after himself), and added another day to it, so as not to be inferior to the month of July in any respect. This led to February being deprived of one of its days, and in order not to have three months of 31 days each following one another, a day apiece was taken from September and November and given to October and December. Hence the irregular order of our long and short months.

The average length of the Julian year, as above stated, was fixed at 365 days, 6 hours; but the actual length of the solar year is 365 days, 5 hours, 48 minutes, 48 seconds. The Julian year, therefore, gained upon the true

\* That is, in brief, if the new moon happens on the first day of the solar year, it happens on the first day of the twentieth solar year next following; so that the lunar and the solar year after nineteen solar years, or two hundred and thirty-five revolutions of the moon round the earth, start level on the first day of the twentieth. Though not absolutely correct, this cycle is extremely convenient.

\* For a full explanation of this curious scheme, see Smith's "Dictionary of Christian Antiquities," article "Week."



solar year at the rate of 11 minutes, 12 seconds a year. In the course of centuries the discrepancy hence arising began to show itself very inconveniently, and the popes were often urged to effect a reform. This was pressed chiefly on the ground that Easter and the Church festivals depending on the time Easter is celebrated were all thrown out of their proper seasons. Reiterated remonstrances at last had their effect. Pope Gregory XIII, in 1582, assisted by Aloysius, Lilius, Clavius, and others, took up the work and carried it out thoroughly. The equinoxes at this date appeared seven days earlier than in 325, when the Council of Nice was held, and the prevailing rule as to Easter was established. The mode adopted of reforming the civil year was simple and effective. The Julian year was gaining on the true solar year at the rate of three days and three hours in 400 years. All that was necessary was to drop three days in that period. Therefore every centenary year which was not divisible by four was made for the future a common instead of a leap-year. The years 1600, 1700, 1800, 1900, 2000, were to have been bissextile or leap-years; but, by the regulation of the Pope and his helpers, the years 1700, 1800, and 1900 were to receive no intercalation, while the years 1600 and 2000 were to be leap-years, as before. As by this process the Gregorian year is only twenty-four seconds longer than the mean tropical, it will take 3,600 years (if the world last so long) before posterity will find themselves a day in advance. The bull of the Pope ordering this reform was issued February 24, 1582, and as the year was now ten days in the wrong, it was made right by requiring the 5th of October to be the 15th. This brings us to the date in 1882 which is the tercentenary of the birthday of the Gregorian Calendar.

As was stated above, there is a lunar calendar for the use of those churches in Christendom which follow the rule of the Council of Nice in regard to the great festival of Easter. A lunar cycle is of course a necessity for this purpose, and at different dates different cycles have prevailed. The cycle of Meton, improved by Calippus, introduced at Athens, in the fifth century B. C., obtained much favor, and was adopted at Alexandria, and subsequently at Rome. As revised by Dionysius Exiguus, it was still to a certain extent in error, amounting to a day in excess after 308 years. Hence some method was to be devised of bringing the lunar year into harmony with the Gregorian solar year. A compendious table was wanted to find the new moons for any date in the past or future. The simplest plan was to adopt the tables for finding the new moons which had been previously in use, applying to it the necessary correctives. The "Golden Number," the "Epect," the "Dominical Letter," are the names applied to the Prayer-Book tables in connection with this subject. Our limits do not admit of details. It is sufficient to say that the united devices furnished by these in-

dicate the date of Easter in each year. The Golden Number gives us the place of the year in the cycle of 19. The Epect supplies the age of the moon at the beginning of the first year of the cycle, and by inference its age at the beginning of the other eighteen years, regard being always had to the century. The Dominical Letter informs us upon what days of the year in question Sunday falls. But these methods do not determine Easter with entire accuracy, according to the rules laid down by the Council of Nice. The vernal equinox is assumed to be the 21st of March, at which time it happened to fall A. D. 325, the date of the council. Owing to what is called the "precession of the equinoxes," the vernal equinox is found to vary from year to year, being sometimes on the 20th, and even the 19th of March. But as this one date was fixed, for the purpose in view, on the 21st, it enables calculations to be made on a settled basis for the movable feasts; and certainly, in so far, the laying down the rule by the council was a good thing for the Church and Christian world.

The Gregorian Calendar was introduced into the greater part of Italy, as well as into Spain and Portugal, on the day named in the Pope's bull. It was adopted in France two months after, and, by an edict of Henry III, December 9th was followed by the 20th. The Roman Catholic parts of Switzerland, Germany, and the Low Countries, adopted the correction in 1583, Poland in 1586, Hungary in 1587. The Protestant parts of Europe resisted, for more than a century, the change, mainly owing to an unwillingness to receive anything from the source whence it emanated. At last, in 1700, Protestant Germany, as well as Denmark and Holland, put aside their prejudice in this matter, and the Protestant cantons of Switzerland copied their example the following year. In England, an attempt was made, as early as 1584, to introduce the new style; but it failed of success. Finally, however, in 1751, an act was passed regulating the beginning of the year for the future, and correcting the calendar now in use. The old year began on the 25th of March. The act provided that the new year, 1752, should begin January 1st; and, as the year was now eleven days out of the way, it was enacted that the 3d of September should be reckoned the 14th. Sweden adopted the Gregorian Calendar in 1753. Russia, however, and those countries where the Greek Church is predominant, adhere to the Julian year, or "old style," as it is called.

GUATEMALA (REPÚBLICA DE GUATEMALA), one of the five independent states of Central America. According to recent census returns, the population\* of the republic in October, 1882, was 1,226,602, against 1,200,000 estimated in 1875. Of the number given for the year first mentioned, 381,828 (185,536 males and 196,292 females) were classified as "not In-

\* For statistics relative to area, territorial divisions, population, etc., see "Annual Cyclopædia" for 1875 and 1880.

dians"; the Indian population stood at 844,774 (421,518 males and 423,256 females). The general movement of the population in March, 1882, was as follows: births, 4,564; deaths, 2,298; and in April, births, 4,779; deaths, 2,482. The number of civil marriages registered in these two months was 165 and 155 respectively. Livingston, on the Atlantic coast, has been declared a free port, and made the capital of the Department of Izabal, in lieu of the town of the latter name.

The President of the Republic is General Rufino Barrios, elected May 7, 1873. His term of office was prolonged by decree of the Constitutional Assembly, under date of October 23, 1876, and he was re-elected March 15, 1880, for a period of six years.

The Cabinet was composed of the following Ministers: Foreign Affairs, Dr. F. Cruz; Interior, Dr. C. Diaz Mérida; War, General J. M. Barrundia; Public Instruction, Señor Del-fino Sanchez; Agriculture and Public Credit, Señor A. Peña; Public Works, Señor M. Herrera.

The Guatemalan Minister Plenipotentiary to the United States was Dr. Lorenzo Montúfar,\* and the Consul-General (for the Union), at New York, is Señor Jacobo Baiz.

The United States Minister Plenipotentiary to the five Central American Republics (and resident in Guatemala) is Hon. H. C. Hall, and the United States Consul at Guatemala City, Dr. F. H. Titus.

The armed force of the country comprises some 2,100 men in active service, and about 33,000 militia.

The results of the annual school examinations testified, as in preceding years, to the healthy progressive development of the admirable system of public instruction adopted in Guatemala, and now established on so firm a basis as to warrant the presumption that government aid may soon be in a great measure dispensed with in that direction. "Forty years ago," writes a native journalist, "the estimated annual expenditures of the University of Guatemala did not exceed \$6,600; at the present time upward of \$30,000 are disbursed yearly for the several professional schools in which are taught the branches that formerly comprised the university course. Among the schools just referred to are not included the schools of arts and trades, of agriculture and of commerce, the annual government outlay for which is \$20,490, \$5,900, and \$1,920, respectively. In the report of the Minister of Finance, for 1881, the total expenditure for public instruction figures at \$360,039, against but \$245,695. Measures had been taken for extending the scope of the National Library; an additional librarian had been appointed, and a catalogue of the volumes contained in the institution was in course of preparation.

STATISTICS.—The amounts and branches of the national revenue and expenditures for the

fiscal year 1880-'81 were as shown in the sub-joined table:

REVENUE.	
Balance from the preceding year.....	\$121,477
Custom-house, wharfage, etc.....	2,143,161
Spirit, milling, slaughter-house, and salt taxes....	1,889,835
Stamped paper.....	102,460
Other indirect imposts.....	49,176
Direct taxes.....	85,045
Monopolies (saltpeter, tobacco, etc.).....	889,180
Reimbursements and interest.....	157,390
Loans.....	1,901,980
Deposits.....	435,872
National Bank.....	171,981
Sundries.....	582,212
Total.....	\$7,479,719
EXPENDITURE.	
Administration.....	\$2,539,375
National debt, etc.....	8,418,649
Monopolies (exclusive of spirits and tobacco).....	163,243
Reimbursements.....	48,638
Deposits.....	322,040
Sundries (including the spirit and tobacco monopolies, Post-Office and telegraphs, Mint, charitable institutions, police force of the capital, etc.).....	826,944
Balance.....	165,880
Total.....	\$7,479,719

The *balance* in this table represents, of course, a computed *surplus*, whose presence it is hard to explain where deficits are the almost invariable rule.

In the budget for the fiscal year ending June 30, 1883, the revenue was estimated at \$5,158,096, and the expenditure as follows:

Executive power.....	\$30,000
Legislative power.....	15,370
Ministry of Foreign Affairs.....	77,490
" Interior and Justice.....	278,660
" Finance and Credit.....	450,000
" War.....	1,443,175
" Public Instruction.....	500,000
" Public Works.....	553,857
Payments guaranteed by import duties.....	567,992
Payments guaranteed by export duties.....	797,798
National debt (home branch).....	189,021
National debt (foreign branch).....	230,804
Total.....	\$5,184,157

The Minister of Finance calls attention to the circumstance of a conditional indebtedness of the Government to the unfinished branch of the railway between Esequintla and Guatemala, in the sum of \$500,000, and to the line from Champerico to Retalhulen, now in process of construction, in the sum of \$700,000, and adds: "These eventualities have not been included in the estimated expenditures. Were the corresponding bonds emitted, the redemption of these would in all probability interfere with the equilibrium of the budget; but what matters a deficit representing a step forward on the road of progress?"

According to official reports, the national debt on January 1, 1880, stood as follows:

Foreign debt.....	\$3,804,966
Home debt.....	4,029,892
Total.....	\$7,834,858*

By January 1, 1882, it had been reduced to \$7,139,169.

In 1882 an arrangement was entered into between the Government and the holders of

\* Resigned in August, 1882.

\* See "Annual Cyclopædia" for 1881, p. 380.



home-debt bonds, for the gradual redemption of these. The interest, meantime, was reduced from 9 to 6 per cent; and the bondholders agreed to advance to the Government 10 per cent on the bonds, whereby the national Treasury would benefit by an accretion of \$200,000. As a proof of the stringency of the times in Guatemala, however, it may be stated that the payment of the monthly drawing of the National Lottery for August was postponed until September 15th, a circumstance up to that time unprecedented in the four years of the existence of the institution.

The exports from Guatemala for the year 1881 were of the total value of \$4,084,000; and the imports of the total value of \$3,665,000. The coffee sent out of the country was of the value of \$3,645,220; and other minor staples were represented by the following figures: hides, \$106,879; wool, \$48,000; India-rubber, \$75,271; cochineal, \$45,077; specie, \$117,187. On comparing these results with those for 1878,\* a marked decrease in some of the shipments will be observed in the later of the two years. The cochineal exported in 1881, for instance, shows a value of but \$45,077; while that shipped in 1878 was of the value of \$220,000. Again, in 1878, there were sugar and indigo exports of the respective values of \$110,600, and \$1,300; and these commodities do not figure at all among the exports for 1881. Indeed, a period of general commercial depression seems to have set in for Guatemala, in common with other Spanish-American countries. In regard to coffee, for example, the chief staple of export, Guatemalan shippers exclaim that the present low price of that article in all the markets of the world has completely demoralized business, causing the ruin of many and hampering all. Until either coffee returns to its normal value, or other agricultural products now being cultivated begin to bring in fresh wealth, there is little hope of a return to really prosperous times.

In 1881 the number of vessels entered at the several ports of the republic was as follows: 133 steamers, of an aggregate of 202,242 tons; and 73 sailing-vessels, of an aggregate of 16,991 tons. The clearances were approximately of an equal number. The railway from San José, the principal port of the republic on the Pacific coast, to the capital, has been in operation for nearly two years from the first-mentioned point to Escuintla; and work on the remainder (from Escuintla to Guatemala city) has been carried on, though not uninterruptedly, ever since. The Guatemala Central Railroad Company has been succeeded in its property and franchises by a new corporation, organized in the United States under a law

passed at Albany on June 6, 1882, and called the "Central American Pacific Railway and Transportation Company." A project is talked of to connect the Salvador port of La Unión with the Guatemala system of railways, and another of extending the latter system from Guatemala city to the Atlantic port of Santo Tomás, thereby completing railway communication between either ocean, to the incalculable advantage of the two republics thus united.

A line of horse-car railroad from Guatemala city to the suburb Jocotenango was to be completed in September. Branch lines were to be extended through the principal thoroughfares of the capital. There were in 1881 upward of 3,600 miles of telegraph established, with sixty-three offices. The number of dispatches was 222,456, of which 56,608 were on official service, and the receipts and expenditures were \$51,493, and \$98,230, respectively.

The vexed question of limits with Mexico has at last been settled, to the mutual satisfaction of both countries. President Barrios, accompanied by some of his Cabinet ministers, visited the United States in July, for the purpose of obtaining the good offices of President Arthur as arbitrator. A convention was signed by the representatives of the negotiating republics (Señor Romero representing Mexico), the main articles of which preliminary document are briefly as follows:

1. The Republic of Guatemala relinquishes her claim to the State of Chiapas and its Department of Soconusco.

2. The definitive treaty of limits between Mexico and Guatemala will be concluded on the ground that Chiapas and Soconusco form an integral part of the United States of Mexico.

3. The Republic of Guatemala, satisfied with the expressed appreciation of its conduct on the part of Mexico, and the acknowledgment by the latter that the ends held in view by Guatemala on agreeing to the terms of the preceding articles were noble and honorable, will claim no pecuniary indemnity or compensation for the surrender of rights as above stipulated.

4. In the event of disagreement as to the line of demarkation, and the necessity of appeal to a third party, Mexico and Guatemala will jointly request the arbitration of the President of the United States.

5. In fixing the dividing line, the general rule of the *uti possidetis* will be observed, save where it may be desirable to follow natural lines. And, pending the final determination of said line, each of the contracting parties will respect the present possessions of the other.

6. The Governments of the United States of Mexico and Guatemala bind themselves hereby to sign, in Mexico city, and not later than six months from this date, the final treaty, on the bases herein expressed.

\* See "Annual Cyclopædia" for 1879, p. 463.

## H

**HARVESTS OF THE WORLD IN 1882.** A volume published annually by M. Estienne, of Marseilles, France, contains reports of the harvests of the year from fourteen countries in all, thirteen of these being corn-growing countries of Europe.

FRANCE naturally receives fullest attention. Reports are given from 89 departments against 90 of the year preceding, accompanied by a colored map marking the state of the wheat-crop in each. In 20 departments the wheat-crop is marked *very good*; in 47 it is *good*; in 11 it is *fairly good*; in 10 it is *middling*; and in 1 only it is *bad*. The year preceding the crop was very good in 3 departments, good in 30, fairly good in 23, medium in 24, and bad in 10. In 1880 the figures were: 5 very good, 17 good, 26 fairly good, 16 medium, and 6 bad. From these figures it plainly appears that the reports of 1882 are better than those of either 1881 or 1880. Oats are reported on from 88 departments. In 22 the crops are very good, in 56 good, in 2 fairly good and 1 passable, and in 7 medium. In 1881 the reports gave only 6 very good, 21 good, 18 fairly good, 26 medium, 10 bad (81 departments). Thus, the oat-crop, 1882, is more largely reported and generally superior to the previous year. Maize is not largely grown, there being reports from only 36 departments, chiefly in the south of France, against 25 departments in 1881, and 33 in 1880. In 2 departments it is very good, in 25 good, in 3 fairly good, in 5 medium, in one very medium. This is much better than was reported in 1881. The crop, however, was a very good one in 1880, there being 3 departments very good, 19 good, 5 fairly good, 6 medium. Reports on rye are given from 77 departments; of these 6 are very good, 52 good, 10 fairly good, 1 passable, 7 medium, 1 bad. In 1881 this crop was very good in 6 departments, good in 19, fairly good in 17, medium in 16, bad in 5, very bad in 2. In 1880 in 11 departments it was very good, in 53 good, in 6 fairly good, in 3 medium. Thus the crop in 1882 is superior to that of the two preceding years. Barley is reported upon from 76 departments, as against 70 in 1881; of these 15 are very good, 46 good, 9 fairly good, 4 medium, 1 bad, 1 very bad. The report of 1881 gave 8 departments very good, 33 good, 13 fairly good, 1 passable, 14 medium, 1 bad. In 1880 the crop was very good in 26 departments, good in 40, fairly good in 5, and medium in 8. Thus, as it appears, the crop is good, but hardly equal to that of two years ago. The whole of the figures on the various crops show that the harvest of 1882 is superior, taken all round, to either of the two previous years. With the one exception of barley, all the crops are better, while wheat is superior to that of any year yet reported on.

**GREAT BRITAIN.**—In estimating the harvest of 1882 in Great Britain, inquiries on the state of the crops were sent largely to farmers actually engaged in growing them, and they were asked to give their opinions by numbers, 100 being taken as representing an average. In all, 414 answers were sent in, and these show the following picture of the crops, the figures from a similar return last year being given for comparison:

	Wheat.	Barley.	Oats.	Beans.	Peas.
1882 .....	92·2	95·4	105·1	108·1	101·6
1881 .....	90	110	80	..	..

	Roots.	Potatoes.	Grass Hay.	Clover Hay.
1882 .....	107·1	96·4	112·6	118·4
1881 .....	80	98	65	65

So far as the English counties are concerned, the following are the figures representing the three leading cereal crops, 100 representing an average:

COUNTY.	Wheat.	Barley.	Oats.
Bedford.....	90·1	90·5	100·3
Berks.....	95·2	100·2	100·6
Buckingham.....	97·4	97·3	95·0
Cambridge.....	100·0	95·3	115·0
Chester.....	95·2	90·1	100·0
Cornwall.....	85·4	95·1	104·3
Cumberland.....	88·2	92·1	104·0
Derby.....	92·5	88·4	100·2
Devon.....	85·2	94·2	105·6
Dorset.....	85·0	90·0	95·3
Durham.....	100·0	110·2	104·8
Essex.....	88·2	103·1	110·4
Gloucester.....	104·6	96·2	108·0
Hants.....	99·4	102·3	115·4
Hereford.....	91·2	98·8	99·7
Hertford.....	90·0	100·0	105·0
Hunts.....	96·3	94·1	106·2
Kent.....	100·4	...	105·6
Lancaster.....	85·4	85·4	98·3
Leicester.....	86·2	94·2	100·4
Lincoln.....	101·3	108·0	108·3
Middlesex.....	...	...	...
Monmouth.....	95·0	85·0	115·6
Norfolk.....	92·0	110·0	115·8
Northampton.....	75·0	60·0	80·0
Northumberland.....	87·1	98·2	106·4
Nottingham.....	100·0	98·1	105·0
Oxford.....	95·2	100·4	100·2
Rutland.....	...	...	...
Salop.....	80·0	90·0	95·0
Somerset.....	100·0	105·2	120·2
Stafford.....	95·1	90·3	96·0
Suffolk.....	90·0	100·2	104·3
Surrey.....	85·0	100·0	110·0
Sussex.....	110·0	107·5	110·0
Warwick.....	90·0	76·4	105·3
Westmoreland.....	88·3	84·2	102·1
Wilts.....	100·0	95·2	100·0
Worcester.....	85·2	95·0	102·5
York, East Riding.....	101·3	92·5	98·4
York, North Riding.....	108·2	102·5	100·0
York, West Riding.....	102·3	101·5	99·5

Allowing that the wheat-crop for 1882 is one of 10,000,000 quarters for consumption, this leaves England (if the wants of the country for the forthcoming year be put at 24,000,000 quarters) dependent upon foreign supply for 14,000,000 quarters. The crops generally are described as



the best for the last seven or more years. Reports from Scotland give the wheat as vigorous, and beyond the average for quality and quantity. Barley suffered for lack of dry and warm weather. A larger than usual acreage of oats was sown, and the yield is considerably beyond an average. Potatoes were fine everywhere, and yielded an abundant harvest. In Ireland cold and damp weather diminished the yield for the year. As at the blooming-time the weather was cold and rainy, and as rust made its appearance in many fields, the wheat-crop is decidedly under average. Oats and barley give a fair average, and potatoes about the same. The acreage planted was one third less than in 1881, which was perhaps the largest and best crop ever obtained.

SPAIN.—The reports stated that the harvest of oats was bad. Barley was poor on the dry lands, but elsewhere good. The reason given is the dry season, and the lack of water for irrigation. For the same reason it was impossible to sow any wheat on the dry lands, and on other lands the crop was poor. All crops in this country for the year were poor, from drought.

BELGIUM.—The weather and temperature in Belgium were very favorable and the harvest abundant. There was an average acreage of wheat, and the yield was good. Oats and rye were reported to be good. Barley yielded well, but the color was bad and the grain light. Potatoes were abundant, and no reports are given of disease anywhere.

HOLLAND.—Elaborate tables are given of the crops in the various provinces. Wheat is reported to be good both for quality and quantity. Rye, though poor for quantity, is very good for quality. Barley, according to the reports, varies for quantity in different provinces, but everywhere quality is pronounced good. Oats are about the same, being slightly better for quality. The *colza* bean (*graines de colza*) is a varied crop, as is also that of hemp (*graines de lin*), good and bad reports being about equal as regards quantity and quality. Potatoes, on the whole, yielded a poor crop.

GERMANY.—Very favorable reports come from Germany. The acreage sown was about the same as in preceding years. Wheat, oats, barley, and rye were each and all good, both for quantity yielded and for quality and weight of grain. The potato-crop was also good.

ITALY.—The reports from Italy on the cereals describe them as excellent both for quality and weight. The yields also were satisfactory. Wheat is reckoned as superb, and weight heavy. Oats and barley were very good; but the bean-crop did not prove so abundant as was hoped.

SWITZERLAND.—On the whole, the weather this year was unfavorable. There was no snow or severe frosts in the winter of 1881-'82, it is true, but in the summer there was too much rain, and before that it was far too dry. Of most crops an average acreage was sown.

Potatoes yielded a fine crop. Wheat was between good and middling, with rust which showed itself in certain areas. Rye and oats gave a good yield.

AUSTRIA-HUNGARY.—In the early part of the year the weather was unfavorable, but during the blooming and earing time it was very fine. There was a smaller acreage under cereals than usual, but potatoes and beans yielded excellent crops. Wheat was good both in quality and quantity, the weight being 78 to 82 kilogrammes per hectolitre (i. e., 170 to 180 pounds avoirdupois per 2½ bushels). Oats are described as a fair harvest, both for quantity and quality, the grain showing a weight of 47 to 48 kilogrammes per hectolitre (i. e., 104 to 106 pounds per 2½ bushels). Maize yielded well. Rye was middling as to quantity, quality good, weight 70 to 72 kilogrammes per hectolitre (i. e., 154 to 158 pounds per 2½ bushels). Barley was good, so far as quantity goes, but of middling quality, weight varying from 61 to 67 kilogrammes per hectolitre (i. e., 134 to 146 pounds per 2½ bushels).

TURKISH PROVINCES ON THE DANUBE.—The reports from this region are very satisfactory. After seed-time the temperature was regular, though previously it had been very dry. A larger than usual acreage was planted, and the result has been excellent. Wheat is very good for quantity, while the grain is of fine quality and heavy. Oats are a good average crop, but the acreage is a little less than in 1881. A good crop of maize was gathered in. Rye was very good, and of a more satisfactory quality than the previous year; weight also good. Barley was very fine for quality, with heavy grain, though a little lighter than in 1881. The reports just given were chiefly from Salonica. Reports from other provinces agree with these in the main. In some places rains caused slight damage at harvest-time, but the result in substance is the same. Maize and beans yielded an abundant supply.

RUSSIA.—Several reports came from Russia. One from Odessa declared the harvest to be generally an average one. Oats were good, and wheat heavy. Rye was mostly middling; in some cases bad. Barley was reported middling, but in many districts (Kherson and Southern Bessarabia being especially mentioned) none at all is grown. Other reports, however, were generally more satisfactory, and one from Taganrog stated that no complaint could properly be made in respect to the harvest of 1882.

Taking these reports altogether, it is plain that never before (at least during the period that these reports have been collected) has the harvest in Europe been so uniformly good. Usually there has been a deficiency, but in 1882 there is no deficiency reported, and no apparent danger of lack of food-products.

UNITED STATES OF AMERICA.—Looking at the country as a whole, the year 1882 has proved to be one of the most abundant, if

not the most abundant, year on record. In 1881 there was a deficiency east of the Rocky Mountains, when the yield of Indian corn fell off more than 500,000,000 bushels as against the previous year's yield. The wheat-crops also fell off 118,000,000 bushels. But the crops of 1882 exceeded in abundance. The yield of wheat is reported to be over 500,000,000 bushels. Corn is estimated by the Agricultural Bureau at 1,680,000,000 bushels, and by other authorities as high as 1,800,000,000 bushels. From the most reliable sources it is ascertained that the United States have produced 440,000,000 bushels more of corn, and 180,000,000 bushels more of wheat, in 1882, than in 1881. It may not be out of place to mention, in this connection, that American flour, made from the choice grades of spring wheat, has of late years become an important item among exports from the United

States of 1882 are good beyond all previous record, and that there is no likelihood of any deficiency in the food-products needful for the support of life throughout the world.

HILL, BENJAMIN HARNEY, American statesman and jurist, was born in Jasper County, Ga., September 14, 1823; and died at his residence, in the city of Atlanta, August 16, 1882, having almost completed his fifty-ninth year. He received his early education at the school of the Rev. Mr. Corbin, at Corinth, Heard County, Ga. He entered the University of Georgia in 1841, and graduated there in 1844, taking the first honor, and delivering the valedictory oration, in which he gave promise of his remarkable power as an orator, receiving the enthusiastic applause of William C. Preston, of South Carolina, and of Judge Berrien, of Georgia, who happened to be present. Soon after he left college, he was admitted to the



BENJAMIN HARNEY HILL.

States. The shipments grew from 2,000,000 barrels in 1868, to 4,000,000 in 1876, and 8,000,000 in 1881. In 1882 they reached from 9,000,000 to 10,000,000 barrels.

Thus it appears true of America, as well as of Europe, that in this great continent the har-

bar, and in a very short time rose to a place in the front rank of the profession. In 1851, being then twenty-eight years of age, he was elected to the Lower House of the General Assembly, from Troup County. From that time until 1860 he was regarded as the leader



of the Whig party in Georgia, and as one of the most earnest champions of the Union cause, opposed to slavery agitation and secession. When his State seceded, in 1861, he acquiesced in her action, and from that time to the close of the war he was prominent and active in his support of the Confederate Government, and in opposition to reunion. From 1865 to 1870 he took every proper occasion to expose the injustice and impolicy of the "reconstruction measures," publishing his famous "Notes on the Situation." For two years, from 1870 to 1872, he withdrew from public life, advising the people to "accept the situation," resistance being no longer possible. In 1872 he supported Mr. Greeley for the presidency. In 1875 he was elected to Congress as Representative of the Ninth District. In 1876 he was re-elected, and, while occupying a seat in the House of Representatives, was elected United States Senator, defeating Hon. Thomas Norwood and ex-Governor James M. Smith. As an orator and constitutional lawyer he had few equals and no superior in either branch of the Federal Legislature. His fame as a jurist and as an advocate before a jury was fully equal to his fame as an orator; and some of his speeches in important cases in the courts are often cited by members of the bar as masterpieces of power. While intensely Southern in his feelings, and ever ready to enter the lists in defense of Southern honor or Southern rights, he was not sectional in his views. The Union under the Constitution strictly construed, a union of co-equal States enjoying all the rights of self-government, were the bases of his political creed. His speech in the House in reply to Mr. Blaine's attack on the South as responsible for the alleged "atrocities at Andersonville," and his speech in the Senate in denunciation of Mr. Mahone's coalition with the Republican party, are probably the most remarkable forensic efforts of his congressional career. In 1878-'79 he experienced some uneasiness from what was thought to be a little pimple on the left side of his tongue. For upward of a year he paid little attention to it; but as the sore became more aggravated, he sought medical advice and was treated at first by a homoeopathic physician, who pronounced the sore a "benign ulcer." After eight months of this treatment, and finding the affection was becoming rapidly worse, he consulted the famous Dr. Gross, of Philadelphia, who pronounced the disease cancer of the tongue. He was operated on with the knife three times, between July 21, 1881, and March 20, 1882, and after the last operation, by which the whole gland was removed, in the hope, which proved vain, that thereby the whole cancerous taint could be eradicated, Dr. Gross declared the case to be hopeless. The sufferings of the distinguished patient were at times excruciating, but he bore them with the patience and fortitude of a true Christian. He went to Eureka Springs, whose waters are said to be marvelously cura-

tive in cancerous affections, but they failed to benefit him. He then determined to return to Georgia, saying: "Whatever God may have in the future, I am willing to bear without a murmur. But, if I must die, I will go back to the old State that gave me birth, and die on her soil, and among my own people." From the day of his return to Atlanta he gradually sank. For a month before his death his power of articulation was almost gone. He was obliged to resort to a writing-pad to make known his wishes. When his throat became so constricted that he could no longer swallow nourishment of any kind, he realized that his end was near, made his will, and prepared to bid farewell to all earthly things. A few hours before his death, when he was rapidly sinking, and had not spoken a word for many days, or written a word for many hours, his pastor, Rev. Clement A. Evans, reports that "the light of life came full into his eyes once more, and with a slight effort he spoke out in clear, full, and even triumphant accent, the deathless legend of a soul conquering in Christ, and in full view of heaven—'Almost home!'" His death, on the 19th of August, was felt as a personal bereavement in every part of the State. Never was a public man more sincerely or universally lamented. His funeral at Atlanta, on the 20th of August, was attended by an immense concourse of people—by all the State officials, by a large delegation from both Houses of Congress, by the Chancellor and Faculty of the University of Georgia, and by delegations from the bar and from all the principal cities and towns in the State. The houses along the route to the cemetery were draped in mourning, the flags were at half-mast, the business houses closed, the bells of all the churches tolled at intervals, and the silence in the thronged streets, and the sorrowful countenances of the people, showed how truly they loved and mourned the illustrious dead.

#### HUNGARY. (See AUSTRIA-HUNGARY.)

HURLBUT, Major-General STEPHEN A., United States Minister to Peru, died on April 3d. He was born at Charleston, S. C., November 29, 1815, and was the son of a Unitarian clergyman, from whom he received his education. He studied law, and practiced his profession in his native city until the breaking out of the Florida War, in which he served as adjutant in a South Carolina regiment. He removed to Belvidere, Boone County, Ill., in 1845, and resumed the practice of the law. He represented his district several times in the Legislature, and was a member of the Illinois Constitutional Convention in 1847. At the commencement of the civil war he was appointed a brigadier-general, and was in command at various points in Missouri from May, 1861, to February, 1862, when he was appointed commandant of Fort Donelson. He was in command of the Fourth Division when the army moved up the Tennessee, and was the first to land at Pittsburg Landing, which he held

for a week alone. He was promoted to major-general for meritorious conduct at the battle of Shiloh, and filled various important military positions in the West and South throughout the war. In 1869 he was made Minister to Colombia, in which position he was retained until 1873, when he was elected, as a Republican, to the Forty-third Congress from the

Fourth Illinois District, and was re-elected to the Forty-fourth Congress. In 1881 he was appointed Minister to Peru, in place of J. P. Christiancy. In this position he came prominently before the public for a time in connection with the Peruvian and Chilean policy of Mr. Blaine. He was a brother of Mr. W. H. Hurlbut, of the New York "World."

## I

**ILLINOIS. STATE GOVERNMENT.**—The following were the State officers during the year: Governor, Shelby M. Cullom, Republican; Lieutenant-Governor, John M. Hamilton; Secretary of State, Henry D. Dement; Treasurer, Edward Rutz; Auditor, Charles P. Swigert; Attorney-General, James McCartney; Adjutant-General, J. H. Elliott; Superintendent of Public Instruction, James P. Slade; Secretary of Board of Agriculture, Samuel D. Fisher; Railroad Commissioners, William H. Smith, George M. Bogue, and William H. Robinson. Judiciary: Supreme Court, Chief Justice, Pinkney H. Walker; Associate Justices, Alfred M. Craig, John Scholfeld, T. Lyle Dickey, John M. Scott, John H. Mulkey, and Benjamin R. Sheldon.

**LEGISLATURE, SPECIAL SESSION.**—The Legislature was convened in special session on the 23d of March by the Governor, for the following purposes:

1. To apportion the State into senatorial districts.
2. To apportion the State into congressional districts, and to provide for the election of Representatives therein.
3. To provide for submitting to a vote of the people of the State, at the next general election, the proposition for the transfer of the Illinois and Michigan Canal to the United States.
4. To provide for the appointment of a commission to report to the next General Assembly a revision of the law in relation to criminal jurisprudence.
5. To appropriate one half of the interest of the College and Seminary Fund for the ordinary expenses of the State Normal University.
6. To make appropriations for the expenses of the special session of the General Assembly.

It remained in session until the 6th of May. Six acts and three joint resolutions were passed, the chief of which were the congressional and senatorial apportionment acts, the act appropriating one half of the interest of the College and Seminary Fund for the ordinary expenses of the Illinois State Normal University, at Normal, the act ceding the Illinois and Michigan Canal to the United States, and the memorial to Congress in regard to the Hennepin Canal. The fourth proposition was not acted upon. The congressional districts are as follow:

First District: the First, Second, Third, and Fourth Wards in the city of Chicago, and the towns of Riverside, Hyde Park, Lake, Lyons, Calumet, Worth, Palos, Lemont, Thornton, Bremen, Orland, Bloom, and Rich, in the county of Cook.

Second District: the Fifth, Sixth, and Seventh Wards in the city of Chicago, and that part of the Eighth Ward in the city of Chicago which is south of

the center of Polk Street and the center of Macalester Place.

Third District: the Ninth, Tenth, Eleventh, Twelfth, Thirteenth, and Fourteenth Wards in the city of Chicago, and that part of the Eighth Ward in the city of Chicago which is north of the center of Polk Street and the center of Macalester Place.

Fourth District: the Fifteenth, Sixteenth, Seventeenth, and Eighteenth Wards in the city of Chicago, and the towns of Lake View, Jefferson, Leyden, Norwood Park, Evanston, Niles, Maine, Elk Grove, Schaumburg, Hanover, New Trier, Northfield, Wheeling, Palatine, Barrington, Cicero, and Proviso, in the county of Cook.

Fifth District: the counties of Lake, McHenry, Boon, De Kalb, and Kane.

Sixth District: the counties of Winnebago, Stephenson, Jo Daviess, Ogle, and Carroll.

Seventh District: the counties of Lee, Whiteside, Henry, Bureau, and Putnam.

Eighth District: the counties of La Salle, Kendall, Grundy, Will, and Du Page.

Ninth District: the counties of Kankakee, Iroquois, Ford, Livingston, Woodford, and Marshall.

Tenth District: the counties of Peoria, Knox, Stark, and Fulton.

Eleventh District: the counties of Rock Island, Mercer, Henderson, Warren, Hancock, McDonough, and Schuyler.

Twelfth District: the counties of Cass, Brown, Adams, Pike, Scott, Greene, Jersey, and Calhoun.

Thirteenth District: the counties of Tazewell, Mason, Menard, Sangamon, Morgan, and Christian.

Fourteenth District: the counties of McLean, De Witt, Piatt, Macon, and Logan.

Fifteenth District: the counties of Coles, Edgar, Douglas, Vermilion, and Champaign.

Sixteenth District: the counties of Cumberland, Clark, Jasper, Crawford, Clay, Richland, Lawrence, Wayne, Edwards, and Wabash.

Seventeenth district: the counties of Macoupin, Montgomery, Shelby, Moultrie, Effingham, and Fayette.

Eighteenth District: the counties of Bond, Madison, St. Clair, Monroe, and Washington.

Nineteenth District: the counties of Marion, Clinton, Jefferson, Franklin, Hamilton, White, Saline, Gallatin, and Hardin.

Twentieth District: the counties of Perry, Randolph, Jackson, Williamson, Union, Johnson, Pope, Alexander, Pulaski, and Massac.

For senatorial purposes the State was divided into fifty-one districts, each entitled to one Senator and three Representatives, of which ten districts are in Cook County, which includes the city of Chicago. The following are the principal provisions of the act ceding the canal:

That the Illinois and Michigan Canal, its right of way and all its appurtenances, and all right, title, and interest which the State may now have in any real estate ceded to the State by the United States



for canal purposes, be and are hereby ceded to the United States for the purpose of making and maintaining an enlarged canal and water-way from Lake Michigan to the Illinois and Mississippi Rivers, and this cession is made upon the condition that the United States shall, within five years from the time this act takes effect, accept this grant, and thereafter maintain the said canal and water-way for the purpose aforesaid. In case the United States shall accept this grant, it is upon the express condition that the canal shall be enlarged in such manner as Congress may determine, and be maintained as a national water-way for commercial purposes, to be used by all persons, without discrimination, under such rules and regulations as Congress may prescribe; and the real estate aforesaid, hereby conveyed to the United States, shall be used, and the avails thereof applied, to carry out the objects of this grant, and for no other purpose, in such manner as Congress may determine. This act shall not take effect until it shall first have been submitted to a vote of the people of the State of Illinois at the general election to be held on Tuesday, the fifth day of November, A. D. 1882, and have been approved by a majority of all the votes polled at such election.

The memorial relating to the Hennepin Canal asked "the Congress of the United States to authorize, provide for, and direct, at its present session, an early construction of a canal for commercial purposes from Hennepin, on the Illinois River, westward to the Mississippi River, on the most feasible route."

**FINANCES.**—The following statement will give a clear idea of the cost of the State government in all its departments—executive, legislative, and judicial—and of the State institutions, educational, charitable, and penal—since the adoption of the present Constitution. These aggregates include every disbursement except for public schools, payment of State debt, and the Military Fund:

From December 1, 1870, to December 1, 1872.....	\$4,102,978 84
From December 1, 1872, to December 1, 1874.....	4,158,061 00
From December 1, 1874, to October 1, 1876 (25 months).....	2,895,319 84
From October 1, 1876, to October 1, 1878.....	3,502,409 45
From October 1, 1878, to October 1, 1880.....	3,462,584 27
From October 1, 1880, to October 1, 1882.....	3,673,446 12

The receipts and disbursements at the State Treasury, omitting local bond fund and other trust funds, for the two fiscal years ending October 1, 1882, were as follow:

There was in the State Treasury, October 1, 1880, deducting all outstanding warrants—	
General Revenue Fund.....	\$1,401,827 43
State School Fund.....	316,841 81
Military Fund.....	18,105 05
Illinois Central Railroad Fund.....	198,001 61
	<hr/> \$1,929,775 89

The receipts for the two years ending October 1, 1882, were:

General Revenue Fund—taxes.....	\$4,442,832 49
Illinois Central Railroad.....	774,845 92
Fees of State offices.....	69,880 92
Miscellaneous.....	8,980 37
State School Fund.....	2,092,298 46
Military Fund.....	143,392 92
	<hr/> \$7,522,181 08

Total.....  
\$9,451,956 97

The disbursements for the two years ending Oct. 1, 1882, were:

General Revenue Fund and Illinois Central Railroad Fund—	
On account of State debt.....	\$265,858 88
Revenue Fund.....	8,681,870 51
State School Fund.....	2,132,125 64
Military Fund.....	188,981 88
	<hr/> \$6,218,881 91

The balance in the State Treasury

October 1, 1882, deducting all warrants outstanding, was:	
General Revenue Fund.....	\$2,949,094 84
State School Fund.....	267,014 88
Military Fund.....	17,566 09

Total balance.....  
\$3,233,675 06

"There is," says the Governor in his message to the Legislature, "a considerable balance of General Revenue Fund in excess of what will be needed to pay existing appropriations, some of which will be available to reduce the amount to be raised on the levy of 1883 for general revenue purposes."

The Governor estimates the amounts required to be raised by taxation for all purposes, for the two years 1883 and 1884, as follow:

#### FOR GENERAL STATE PURPOSES.

Expenses of the several departments not enumerated below—	
Legislative.....	\$272,000
Executive.....	450,000
Judicial.....	571,000
	<hr/> \$1,293,000
Ordinary expenses, repairs, improvements and construction of State charitable institutions.....	1,750,000
Expenses of universities.....	145,000
Expenses and construction of prisons.....	225,000
Canal Contingent Fund.....	60,000
For conveying convicts, arresting fugitives, and for transfer of insane patients.....	98,000
Printing, binding, stationery, and paper for General Assembly and Executive Departments.....	110,000
	<hr/> \$3,681,000

#### FOR STATE SCHOOL PURPOSES.

One million dollars per annum.....\$2,000,000

#### FOR MILITARY PURPOSES.

Seventy-five thousand dollars per annum.....\$150,000

From this aggregate may be deducted the payments of the Illinois Central Railroad to the General Revenue Fund, estimated for the next two years at \$800,000, and the available surplus of General Revenue Fund, remaining after payment of existing appropriations, and after the payment of all appropriations to be made chargeable to the levy of 1882, in excess of the \$1,500,000 which that levy is estimated to yield.

**EDUCATION.**—During the year ending June 30th, there were 11,529 public-school districts in the State. Out of this number, there were 77 districts in which there was no school, 113 in which the school term was less than 110 days, and 11,339 in which school was kept for over 110 days. These schools were in session 85,423 months, or an average of 7-15 months. The total attendance was 713,431 pupils, of whom 364,043 were males and 349,388 were females. There were 22,301 teachers employed, 8,076 of whom were males and 14,225 females. The highest monthly wages paid to any male teacher was \$250, and the lowest \$13.50. The maximum wages paid to female teachers was \$120, and the minimum \$10. The average wages paid to male teachers was \$46.86, and the average wages of female teachers was \$37.76. The total amount earned by the

teachers of the State during the year was \$4,991,070.87, of which sum \$2,013,606.98 was paid to male and \$2,977,463.89 to female teachers.

There were 893 of the school districts which had libraries, the total number of volumes being 59,278, 5,285 of which were added during the year.

There were 1,003 private schools in the State during the year, with a total attendance of 67,380 pupils, 32,614 male and 34,766 female. The number of teachers was 1,789, of whom 698 were males and 1,091 were females.

The financial statement shows the total balance and receipts to be \$10,537,296.23. The total expenditures were \$8,043,430.61, and the amount of loans of district funds was \$89,710.53, leaving a balance of \$2,404,155.09 on hand.

The Supreme Court, in a case decided during the year, holds that colored children, under the Constitution and laws of the State, can not be excluded from the public schools provided for white children.

**RAILROADS AND CANALS.**—The report of the Board of Railroad and Warehouse Commissioners, for the year ending June 30, 1882, shows an addition during the year of over 493 miles to the aggregate of railroad lines in the State, of which the largest amount (83 miles) was constructed by the Wabash lines. The aggregate length of main lines and branches of roads operated in Illinois is 27,475.81 miles, of which 8,541.38 miles are in the State, making, with 394.65 double-track and 1,527.67 side-track, a total of 10,463.70. This is largely in excess of any other State in the Union, Pennsylvania coming second with 6,690 miles, followed by Ohio, New York, and Iowa, each with over 6,000 miles, all other States falling below that amount.

The forty-six roads operated in the State did an aggregate business during the year of \$189,362,978—an increase of over thirteen and a quarter millions since 1881, and nearly \$84,000,000 since 1878. Of the aggregate receipts, \$42,782,977.63 was from the passenger department and \$126,767,839.73 from freights. The gross earnings from Illinois business amounted to \$57,396,287.58, while the total expenses for operating, taxes, etc., were \$37,628,704.77—forty-one companies making a profit of \$18,879,058.63, and five sustaining a loss of \$111,475.82—net profit, \$18,776,582.81. The aggregate operating expenses of all the roads doing business in the State were \$119,757,996.06, against a gross income of \$189,362,997.63—a net income of \$69,357,001.57. Over \$30,000,000 was paid for interest on bonded debt, and between eleven and twelve millions for rentals and other extraordinary expenses, leaving a balance of nearly \$29,000,000 applicable to the payment of dividends, of which 14 roads paid out \$21,208,335.07.

The whole number of passengers carried by Illinois roads was 45,953,045, of which 13,088,-

032 were through and 32,865,013 were local—about half the latter being in Illinois. The tons of freight were 78,093,592—17,694,769 being through and 60,398,823 local; the Illinois business comprised 10,250,946 tons, and of the through freight 24,783,811 tons were carried in Illinois. The leading roads show a material increase of freights during the year.

A noteworthy feature of the report is the evidence which it presents of the gradual submission of the roads to the schedules of freights and fares prescribed by the commission, and the moderate though steady reduction in each, amounting in the aggregate to millions of dollars—the result in large part of putting the railroads under judicious control.

The report of the Canal Commissioners sets forth the operations of the Illinois and Michigan Canal, and the Illinois and Little Wabash River improvement, for the year ending November 30th. The commissioners state that the canal was opened for navigation March 13th, and closed November 30th. The receipts for the year exceed the disbursements by \$4,177.66. In 1880 the expenditures exceeded the receipts \$13,646.73, and in 1881, \$5,601.63. The receipts and disbursements for the several years the present commissioners have had charge of the State works have been as follow:

YEAR.	Receipts.	Disbursements.
1877.....	\$120,568 70	\$126,662 39
1878.....	108,804 21	90,379 82
1879.....	111,742 97	108,669 40
1880.....	115,685 37	129,282 30
1881.....	106,640 57	112,242 20
1882.....	117,245 80	113,071 52
Total.....	\$680,941 10	\$677,307 63

Balance on hand December 1, 1876.....	\$46,489 49
Receipts for the six years.....	650,941 10
Disbursements for the six years.....	677,307 63
Amount on hand December 1, 1882.....	50,122 96

In regard to suits, the commissioners say the suits for 1881 that were brought by the St. Louis and Peoria Packet Company, and by Huse, Loomis & Co., for the collection of tolls at the Henry and Copperas Creek locks, are still pending. The plaintiffs aver that the Illinois River is a national highway, and should be free from tolls. The commissioners claim that, by virtue of powers vested, they have a right to collect tolls levied. Both of these suits are of the greatest importance, not alone to the State of Illinois, but to the commerce of the West.

**STATISTICS.**—The publication of the results reached in the tenth census reveals an astounding increase in the number of deaf and dumb, the blind and the insane, in this State, as in the country at large. For the latter the State has four asylums, which do not contain one half. It may be said that no former enumeration of the afflicted classes has been so complete, and that the increase referred to has been more apparent than real. However this may be, the numbers reported in Illinois in 1870 and in 1880, respectively, are as follow:



	1870.	1880.
Insane.....	1,625	5,184
Idiots.....	1,244	4,170
Deaf-mutes.....	688	2,202
Blind.....	1,042	2,615
Total.....	4,744	14,121

For the deaf and blind, all that the State undertakes to do is to educate such as are of school age. With respect to the deaf, the Superintendent of the Institution for the Education of the Deaf and Dumb reports that there are as many deaf-mutes of school age within the State, who have never been at any school designed especially for their benefit, as there are pupils present in the institution at Jacksonville. Of the 5,000 insane reported, not more than about 2,000 are provided for in State institutions. The number of insane men and women in county almshouses is very great, and constantly increasing, and in several of the larger counties the question what to do with them is a very important and pressing one.

Below are the reports of the wardens of the Illinois Penitentiaries for the month of December, 1882:

## JOLIET PENITENTIARY.

Convicts on hand December 1st.....	1,435
Received from courts.....	48
Returned on <i>habeas corpus writ</i> .....	1
Total on hand December 1st.....	1,484
Discharged during month.....	37
Pardoned during month.....	2
Died during month.....	1
Sent to Insane Asylum.....	2
Out by order of Supreme Court.....	1

Total out..... 43

On hand December 31st.....	1,441
Males.....	1,418
Females.....	23

## CHESTER PENITENTIARY.

Convicts on hand December 1st.....	560
Received during month.....	25
Total.....	585
Discharged during month.....	5
On hand December 31st.....	580
Males.....	572
Females.....	8

The following facts, relating to the charitable institutions of the State, are taken from the report of the State Board of Public Charities for the first quarter of the year:

INSTITUTIONS.	Average number of inmates.	Average cost per capita.
Northern Insane Hospital.....	501.78	\$57.84
Eastern Insane Hospital.....	290.77	77.69
Central Insane Hospital.....	675.96	51.17
Southern Insane Hospital.....	479.22	57.19
Institution for the Deaf and Dumb.....	501.53	51.96
Institution for the Blind.....	116.00	74.10
Asylum for Feeble-Minded.....	295.48	55.21
Soldiers' Orphans' Home.....	802.24	47.50
Charitable Eye and Ear Infirmary.....	70.65	64.90
State Reform School.....	209.84	41.31
Total.....	3,403.48	55.38

The following table gives the acreage, yield, and value of the corn-crops of the State for the past twenty-two years:

YEAR.	Number of acres.	Average yield per acre—bushels.	Bushels produced.	Total value.
1860.....	3,589,150	80	115,174,770	\$78,944,277
1861.....	3,589,159	80	115,174,770	27,641,944
1862.....	3,455,908	40	138,356,185	32,521,911
1863.....	3,773,349	22	88,013,681	51,479,442
1864.....	4,192,610	33	138,356,185	103,767,101
1865.....	5,028,996	35½	177,095,852	51,800,586
1866.....	4,931,783	31.6	155,844,340	67,013,070
1867.....	4,583,655	28.8	109,091,000	74,281,580
1868.....	3,928,742	34.2	134,363,000	57,776,090
1869.....	5,237,068	28.2	121,500,000	69,255,000
1870.....	5,720,965	35.2	201,373,000	70,492,890
1871.....	5,310,469	38.3	203,891,000	65,985,120
1872.....	5,468,040	39.8	217,628,000	62,280,720
1873.....	6,330,714	21	143,034,000	45,962,580
1874.....	7,421,055	18	133,573,000	74,804,240
1875.....	8,168,265	34.3	280,000,000	95,200,000
1876.....	8,920,000	25	223,000,000	69,130,000
1877.....	8,935,411	30	269,889,742	77,562,875
1878.....	8,672,088	29	250,560,810	56,085,942
1879.....	7,913,881	38	305,913,377	97,438,052
1880.....	7,574,545	38	250,097,086	88,757,039
1881.....	7,157,384	24	174,491,706	98,328,977

The acreage, yield, and value of the rye-crop of Illinois, during the past ten years, are as follow:

YEAR.	Acres.	Bushels.	Value.
1871.....	123,083	2,170,000	\$1,122,400
1872.....	122,154	2,211,000	1,105,500
1873.....	134,054	2,073,000	1,205,240
1874.....	132,064	2,036,000	1,445,560
1875.....	137,573	2,600,000	1,586,000
1876.....	161,250	2,580,000	1,496,400
1877.....	231,972	3,825,091	2,103,800
1878.....	252,473	2,915,910	1,195,585
1879.....	235,073	4,238,824	1,991,404
1880.....	149,742	2,737,159	1,512,586
1881.....	465,418	2,955,411	2,408,954
1882.....	182,187	.....	.....

The 1882 crop of winter wheat was the largest, with one exception (1880), ever harvested in the State, and amounted to 50,951,529 bushels. The spring wheat-crop made the aggregate yield a little over fifty-two million bushels. The average yield was not far from eighteen and a half bushels per acre, which is but little below that of 1879, when the largest average yield per acre was obtained.

The area of the crop—2,752,108 acres—has been exceeded but twice (1880 and 1881). The quality of wheat was much better than an average, and has seldom if ever graded more uniformly high throughout the State. The crop was saved in good condition, and either thrashed or stacked immediately after harvest. The 1882 crop returned the producer more money than any crop harvested during the past fourteen years.

The following table shows the number and value of live-stock returned by the assessors in 1881:

LIVE-STOCK.	Number.	Value.
Horses.....	981,909	\$25,418,810
Mules and asses.....	112,361	3,539,418
Cattle.....	2,043,866	20,523,846
Sheep.....	1,083,344	1,403,352
Hogs.....	2,872,074	3,354,500
Total.....	7,000,254	\$59,244,726

**POLITICAL CONVENTIONS.**—The Republican State Convention met in Springfield on the 28th of June, and nominated General John C. Smith, of Cook County, for State Treasurer, and Charles T. Stratton, of Jefferson County, for State Superintendent of Public Instruction. The following platform was adopted:

*Whereas*, The Republicans of the State of Illinois, in State Convention assembled, recognize now the necessity for the continued and continuing perpetuation of the Republican party; the best interests of civil liberty upon this continent, the highest considerations of national honor and integrity, the freedom of the ballot and the purity of the ballot-box, and the prosperity of our industries all demand this: therefore—

*Resolved*, 1. That the policy of the Republican party of the nation and State is unchanged, and to that policy the Republicans of the State of Illinois commit themselves. Fair elections and honest counts, North and South; the honest treatment of the public debts and the public creditors; a reduction of taxation; the encouragement, fostering, and protecting of all American industries, and a hearty approval of the policy of the Tariff Commission, which shall regard all interests, and conserve them all; such a practical reform of the civil service as shall relieve the Executive from the pressure of hordes of office-seekers, and as shall, by providing some intelligent method for appointments to office, enable our Representatives in both branches of the national Congress to turn their attention to matters of national concern; such a system of internal improvement by great water-ways, either natural or artificial, as will afford cheap and easy outlets to the sea of the enormous products of the Great West; the encouragement of friendly and cordial relations between all sections of the country. These are among the great national doctrines of the party in its past, and to these it is committed still.

2. Under the wise and patriotic administration of our State affairs, the debt of the State has been honestly paid, and its credit stands unquestioned and unchallenged everywhere. By that wise administration, the Republican party of the State of Illinois is entitled to the confidence of the people of the State, and will receive that confidence.

3. That, with all liberty-loving men and women of the world, we deplore the death of our late President, James A. Garfield, and with all patriots we renew our devotion to the principles of liberty which the foul hand of assassination can never reach; and we extend to President Arthur our hearty support in all efforts to conduct the affairs of state in the interests of good government.

4. Believing that all divisions and dissensions among Republicans can be honorably and satisfactorily healed, we also believe that now is the time to bury our past differences and unite again under the old flag. Such a union means the triumphant success of the party, now and in 1884; and that success means the continued prosperity and happiness of the country.

5. That the Republican party, now as in the past, is in favor of such just laws as shall protect the agriculturist, the manufacturer, and the working-man from the oppression of monopolists.

The following resolution was also adopted:

*Resolved*, That we extend our hearty sympathy to the oppressed of all nations in all honest efforts to establish liberty and a republican form of government, and that our especial sympathy is extended to all lawful efforts now being made to establish republicanism in Ireland.

The Greenbackers, at their State Convention, in Peoria, on the 2d of August, nominated Daniel McLaughlin, of Braidwood, for State Treasurer, and Frank H. Hall, of Kane County, for State Superintendent of Public Instruction.

They reaffirmed their Chicago platform of 1880, and added clauses in favor of female suffrage and prohibition.

The Democratic State Convention met in Springfield, on the 7th of September, and nominated A. Orendorff, of Sangamon County, for State Treasurer, and Henry Raab, of St. Clair County, for State Superintendent of Public Instruction. The following platform was adopted:

*Resolved*, 1. That the Democratic party of the State of Illinois, in convention assembled, reaffirm the great principles which are the foundation of free government, among which are equal rights to all and exclusive privileges to none, protection of the weak against the encroachments of the strong, equal taxation, free speech, a free press, free schools, and first of all a free and incorruptible ballot.

2. That we favor honest reform in the civil service, and denounce the extortion of large sums of money from office-holders to corrupt the ballot and control elections as the most threatening as it is the most insidious danger that besets a free government; and the shameless resort to such methods by the National Republican Committee, and by the Republican repudiation coalition in Virginia, evinces utter abandonment of principle, and meets our unqualified condemnation.

3. That we denounce the reckless extravagance and profligacy of the Republican party in the appropriation of the public Treasury, as manifested during the late session of Congress, which increased the appropriations for the current fiscal year over those of the past year made by a Democratic Congress to the enormous extent of \$78,000,000.

4. That we extend our heartiest sympathy to the Irish people in the struggle for their rights, in which they are now engaged, and recognize in their persistent efforts to obtain their freedom, despite the dungeon, the scaffold, and all the other infamous appliances characteristic of British rule over Ireland, a love of liberty which is unparalleled in history, and sheds a ray of glory upon the Irish national character, commending it to the respect, admiration, and support of freedom-loving people throughout the world.

5. That it is incumbent upon our Government to protect its citizens, native-born and naturalized, at home and abroad, and we denounce and condemn the present Republican Administration for its neglect of duty toward those lately imprisoned as "suspects" in the jails of Ireland, by the arbitrary action of the British Government.

6. That we are in favor of the reduction of Federal taxation to the lowest point consistent with the wants of the Government under an honest and economical administration of its affairs, and that such taxes be so adjusted as to secure an equitable distribution of these burdens.

7. The Republican party of the State has proved false to the pledges it has made to the people. With not a cent of bonded debt against the State, taxes for the past year have been one third greater than the preceding year. The various boards of the various State institutions have been used more to advance the interests of the Republican party than for the care and comfort of the unfortunate men, women, and children committed to their charge. The various radical State officers are surrounded by numbers of unnecessary clerks and attendants, whose salaries are paid from the State Treasury. The humiliating spectacle is presented of the Governor of the State saying, in his annual message, that the sum of \$3,000,000 would be ample to pay all the expenses of the State for two years, and the same Governor approving bills passed by the Republican Legislature appropriating nearly \$7,000,000 for such expenses; and the large sum received annually from the Illinois Central Railroad Company under the wise provisions of a law enacted by a Democratic Legislature, instead of being utilized



to relieve the people from taxation, has been misused as a stimulus to increased extravagance and increased taxation.

8. That the offices of Warehouse and Railroad Commissioners, now filled by appointment of the Governor, should be filled by election by the people.

9. That we demand a revision of the present unjust and in many respects prohibitory tariff, which is framed in the interest of capital; and while it favors and fosters iniquitous monopolies, is unjust and oppressive to the laboring man in all the relations of life. The Constitution confers on Congress the power to raise revenue by duties on imports, and as a just and proper exercise of that power we favor a tariff based on the principle of revenue, which will deal justly with existing business relations and with all legitimate industries; and at the same time discourage monopolies and remove the burdens imposed by the present tariff upon all the laboring people of the country. And we hereby declare that there is no power given by the Constitution to Congress to levy a tariff or tax on the people for the purpose of protection without reference to revenue.

10. That while we have no purpose to interfere with just laws in force in Illinois for the regulation of the traffic in intoxicating liquors, and conceding the right of the people to an amendment, if necessary, of such laws to prevent or correct the evils to society growing out of abuses in the use of intoxicating liquors, this convention declares that it is not the legitimate province of government to control the habits, tastes, appetites, and liberties of the people as long as they are peaceable and orderly, and do not encroach upon the rights of others or of society; and we therefore declare that the prohibition by the Constitution, or by general laws, of the manufacture or sale of vinous, spirituous, or malt liquors would be in violation of individual and personal rights, and contrary to the fundamental principles of free government.

11. That we appeal to the people of this State, without regard to former political affiliations, to unite with us at the ensuing election in carrying into effect the foregoing principles.

The third annual convention of the Liquor Dealers' and Manufacturers' Protective Association of Illinois met in Rock Island, on the 19th of September, and adopted the following resolutions:

*Whereas*, The danger arising from the prohibition movement is steadily increasing in this State; and

*Whereas*, The thorough organization of all business-men directly interested in the liquor-traffic is now, more than ever, a matter of imperative necessity; and

*Whereas*, The ensuing election of members of the Legislature will, to a great extent, determine the issue of prohibition against personal liberty in our State: be it

*Resolved*, That we consider the maintenance and further development of our present State Association as one of the most effective means of protecting ourselves in our rights as business-men, tax-payers, and citizens, and that the Board of Trustees spare no efforts at once to secure the co-operation of all the various branches of the liquor interest in this State; and be it further

*Resolved*, That we will use our best endeavors to defeat, at the next election, any candidate, for any office, who can not be fully relied upon as being uncompromisingly opposed to all attempts at sumptuary or prohibitory legislation; and be it further

*Resolved*, That we are decidedly in favor of abolishing all the abuses incident to the liquor-traffic, by a proper system of licensing and regulating the business in such manner as to protect our interests and welfare.

*Resolved*, That the manly, outspoken declaration against a prohibitory amendment to our State Con-

stitution, as adopted by the last Democratic State Convention at Springfield, is deserving of the highest praise on the part of this convention.

In January the Illinois State Christian Temperance Union and the Illinois State Temperance Alliance met in Springfield, and the two organizations were consolidated under the name of the Illinois State Temperance Union.

The Prohibition State Convention met in Bloomington, on the 9th of August, 158 delegates, representing twenty-nine counties, being present, and adopted the following platform:

We, delegates assembled, representing the voters of the State of Illinois, having determined to organize a political party and place in the field candidates for various offices to be filled by the electors of the State, declare the following reasons, based on the fundamental principles of this Government, to be the basis of our action:

1. The people having for years and in large numbers exercised the sacred right of petition, asking for submission to the vote of the people of a constitutional amendment prohibiting the liquor-traffic, were refused this right of self-government at the dictation of twelve thousand liquor-dealers, with the excuse that it was not in their party platform.

2. The people, believing that these legislators misrepresented their parties, sent a committee to the Republican State Convention, the dominant political party of the State, asking it to place in its platform a plank affirming the right of the people to amend their Constitution by the only method provided in that instrument, the exercise of which right had been refused by the Legislature. The convention refused to consider this most reasonable request by a vote of 613 to 133. The Democratic party having, by a larger majority of its representatives, in a legislative declaration of its party platform in the past year and the utterance of its well-known leaders, courted the support of the liquor-traffic and opposed even the submission of an amendment to a vote of the people, we can not hope for favorable action by them.

3. All governments must grow with the development of mankind, and must meet new problems as they arise, or the onward march of civilization will overthrow them. The founders of our Government recognized this law, and provided in the Federal and State Constitutions for their peaceable amendment. Consequently, the submission asked for was in accordance with the genius of our institutions.

4. The plank which the dominant party refused to consider is as follows: "*Resolved*, That the Republican party is in favor of submitting to a vote of the people of the State of Illinois a constitutional amendment, prohibiting the manufacture and sale of intoxicating liquors as a beverage."

5. Political parties being a controlling power in our Government, constitutional changes can only be effected by the reorganization of the people as sovereign, and voluntarily submitting amendments for their adoption or rejection, as in Iowa, or on their refusal to do so, as in Illinois, to build up a political party pledged to these principles; and this action is rendered necessary by the fact that this betrayal of the people, if left unrebuked, establishes a dangerous precedent for future party action.

6. All political power is in the people. To deny this is a subversion of the fundamental principles of the Government. The liquor-power, by fighting the submission of the amendment asked for, and seeking, through boycotting and bribery, to prevent the election of men to the Legislature favorable to such submission, and by intimidating and corrupting those already elected, compel aggressive action and thorough organization of all men who love their country, and who favor a free ballot and fair count.

For these reasons we ask all lovers of our free institutions to disregard old party lines, and unite with



the Prohibition party, which not only affirms the governmental principles herein enunciated, but which is ready to engage in the most important contest of the day, the overthrow of the liquor-traffic.

*Whereas*, The manufacture and sale of intoxicating liquors as a beverage are a sin against God, and a crime and a curse to man, which no human enactment nor usage can make right, and that Christianity, humanity, and patriotism demand its prohibition: therefore we favor—

1. The adoption of an amendment to the Constitution of the State of Illinois, prohibiting the manufacture and sale of alcoholic beverages in the State.

2. *Whereas*, The people have petitioned the Legislature to submit an amendment to the State Constitution, prohibiting the manufacture and sale of alcoholic beverages, we are in favor of its submission; and

*Whereas*, The people have also petitioned the Legislature to submit an amendment enfranchising women, we are therefore in favor of its submission.

3. That while we favor all proper legislation in the interest of common schools, yet we are decidedly opposed to applying funds raised from the liquor-traffic for that purpose, thereby giving such traffic a degree of respectability to which it is not entitled.

The following was also adopted:

That we require of all candidates for legislative offices a pledge not to go into a caucus of either of the two old parties.

The following nominations were made: State Treasurer, Judge J. J. Irwin, of Madison; State Superintendent of Public Instruction, Professor Andrews, of Galesburg, for whom another candidate was afterward substituted.

Twenty-three counties in the State grant no license for the sale of spirituous liquors.

An Anti-Monopoly State Convention met in Springfield, on the 15th of March, about one hundred delegates being present, and adopted the following resolutions:

1. That we believe in the doctrine embodied in the railroad legislation of Illinois, and confirmed by the highest courts of the nation, viz., that corporations are subject to the control of the legislative bodies that created them.

2. We believe in the strict enforcement of the present railroad laws of Illinois, and urge our Governor and Railroad Commissioners to more prompt action in prosecuting the almost constant violations of said laws.

3. That we condemn the giving of passes, as an indirect system of bribery and a mode of compelling the public to contribute to the railroad corruption fund, and that in the future we will not support any candidate for any office, whether legislative, executive, or judicial, who will take such a bribe, and who will not use his influence in favor of the enactment and enforcement of a law making the giving or taking a pass bribery, and an offense which will disqualify any man guilty thereof from holding office.

4. That this convention select, as far as possible, a State Committee composed of one or more from each county to detect, report, and prosecute every violation of the laws by the railroad corporations of the State.

5. That this State Committee be recommended to proceed against railroad corporations for the violation of our laws, either through *quo warranto* or the Railroad Commissioners, and that the Attorney-General be notified of the commencement of such proceedings and be requested to prosecute the same.

6. That our commission will not do its duty unless it shall at once give us a passenger rate of two cents a mile on the leading roads of the State, and shall also reform its schedule and cut down the freight rates to an amount at least equal to that now charged to the

people of other States over our railroads in cases where competition compels them to just rates; and that we emphatically condemn the failure of the commission to make a just reduction of the rates of freight on short hauls, in which the people of this State are chiefly interested.

7. That in our judgment the theory and policy of our railroad laws require that the Railroad and Warehouse Commission shall itself, on its own motion, and without formal complaint, begin and prosecute proper suits to punish abuses brought in any way to its notice; that the course heretofore taken by the Railroad and Warehouse Commission, requiring the complaint of the shipper to be filed, exhibited to the railroad, and then answered and heard, unless by terrorism or purchase he is silenced, is the surest way of preventing and suppressing complaints and defeating the enforcement of the law.

8. That while we regard our railroad laws as the most useful known and only needing proper execution and enforcement to fully protect our people in the use of the public highways, and had a right to expect from the Railroad Commissioners protection from railroad extortion and unreasonable charges, these expectations have thus far only resulted in failure and disappointment; that instead of guarding the interests of the people, as duty required, these reputed servants have oftener acted as servants of the railroads.

**ELECTION RETURNS.**—The election in November resulted in the choice of Smith, Republican, for State Treasurer, by a plurality of 5,484; and of Raab, Democrat, for State Superintendent of Public Instruction, by a plurality of 2,869. The vote was as follows:

	Treasurer.	Superintendent.
Republican.....	254,551	250,276
Democratic.....	243,067	258,145
Greenback.....	15,520	14,806
Prohibition.....	11,344	11,202

The Legislature, to meet in January, 1883, will consist of 81 Republicans and 20 Democrats in the Senate, and 77 Republicans, 75 Democrats, and 1 Independent in the House. The proposition to appropriate \$531,712.18 for the completion of the State-House was defeated, not receiving a majority of the total vote cast at the election (532,583), though 281,283 votes were cast for it and only about 153,000 against it. For the act ceding the Illinois and Michigan Canal, 363,855 votes were cast, and against it 59,675, and it was ratified. Eleven Republican and nine Democratic Congressmen were elected, as follow:

First District, Ransom W. Dunham, Republican; Second District, John F. Finerty, Independent Democrat; Third District, George R. Davis, Republican; Fourth District, George E. Adams, Republican; Fifth District, Reuben Ellwood, Republican; Sixth District, Robert R. Hitt, Republican; Seventh District, Thomas J. Henderson, Republican; Eighth District, William Cullen, Republican; Ninth District, Lewis E. Payson, Republican; Tenth District, Nicholas E. Worthington, Democrat; Eleventh District, William H. Neece, Democrat; Twelfth District, James M. Riggs, Democrat; Thirteenth District, William M. Springer, Democrat; Fourteenth District, Jonathan H. Rowell, Republican; Fifteenth District, Joseph G. Can-



non, Republican; Sixteenth District, Aaron Shaw, Democrat; Seventeenth District, Samuel W. Moulton, Democrat; Eighteenth District, William R. Morrison, Democrat; Nineteenth District, Richard W. Townshend, Democrat; Twentieth District, John R. Thomas, Republican.

**IMMIGRATION, CHINESE.** The "Burlingame treaty," concluded between the United States and China in 1868, secured to Chinese the right of immigration into the United States, and stipulated that "Chinese subjects visiting or residing in the United States shall enjoy the same privileges, immunities, and exemptions in respect to travel or residence as may there be enjoyed by the citizens or subjects of the most favored nation." The right of naturalization was excepted from the privileges guaranteed by the treaty. The provisions of this treaty relating to immigration were modified by the treaty concluded between the two governments November 17, 1880. The first two articles of this compact are as follow:

**ARTICLE I.** Whenever in the opinion of the Government of the United States the coming of Chinese laborers to the United States, or their residence therein, affects or threatens to affect the interests of that country, or to endanger the good order of the said country or of any locality within the territory thereof, the Government of China agrees that the Government of the United States may regulate, limit, or suspend such coming or residence, but may not absolutely prohibit it. The limitation or suspension shall be reasonable, and shall apply only to Chinese who may go to the United States as laborers, other classes not being included in the limitations. Legislation taken in regard to Chinese laborers will be of such a character only as is necessary to enforce the regulation, limitation, or suspension of immigration, and immigrants shall not be subject to personal maltreatment or abuse.

**ART. II.** Chinese subjects, whether proceeding to the United States as teachers, students, merchants, or from curiosity, together with their body and household servants, and Chinese laborers who are now in the United States, shall be allowed to go and come of their own free will and accord, and shall be accorded all the rights, privileges, immunities, and exemptions which are accorded to the citizens and subjects of the most favored nations.

**ACTION OF CONGRESS.**—Early in 1882 an act was passed by Congress suspending Chinese immigration to the United States for the period of twenty years. The representative of the Chinese Government, at Washington, protested against the provisions of this measure, and President Arthur vetoed it, mainly on the ground that prohibition for twenty years was not a "reasonable" suspension within the meaning of the first article of the treaty of November, 1880. The President also pointed out other objections to the bill, among others one mentioned in the protest of the Chinese representative that the act prohibited Chinese from passing through the United States on their way from one foreign country to another. This act originated in the Senate. Another bill was then brought forward in the House, fixing the period of suspension at ten years, but in other respects being substantially the

same as the first one. The second bill was signed by the President May 6th.

**THE SECOND ACT.**—This law is entitled "An act to execute certain treaty stipulations relating to Chinese." The preamble recites that "in the opinion of the Government of the United States the coming of Chinese laborers to this country endangers the good order of certain localities within the territory thereof." Section 1 enacts that after the expiration of ninety days after the passage of the act the coming of Chinese laborers to the United States shall be suspended for ten years, and that during such suspension it shall not be lawful for any Chinese laborer to come to the United States, or, having come after the act takes effect, to remain here. The ninety days expired August 4th, and the law went into operation August 5th. Section 2 declares that the master of any vessel, knowingly bringing within the United States and landing or permitting to be landed any Chinese laborer from any foreign port or place, shall be deemed guilty of a misdemeanor, and punishable by a fine of not more than \$500 for every Chinese laborer so brought, and may be also imprisoned not exceeding one year. Section 3 provides that the two foregoing sections shall not apply to Chinese laborers who were in the United States November 17, 1880, the date of the amended treaty with China—or who shall have come here before the act takes effect, "and who shall produce to such master before going on board such vessel, and who shall produce to the collector of the port in the United States at which such vessel shall arrive, the evidence hereinafter in this act required of his being one of the laborers in this section mentioned; nor shall the two foregoing sections apply to the case of any master whose vessel, being bound to a port not within the United States, shall come within the jurisdiction of the United States by reason of being in distress or in stress of weather, or touching at any port of the United States on its voyage to any foreign port or place; provided that all Chinese laborers brought on such vessel shall depart with the vessel on leaving port."

Section 4 is as follows:

That for the purpose of properly identifying Chinese laborers who were in the United States on the 17th of November, 1880, or who shall have come into the same before the expiration of ninety days next after the passage of this act, and in order to furnish them with the proper evidence of their right to go from and come to the United States of their free will and accord, as provided by the treaty between the United States and China, dated November 17, 1880, the collector of customs of the district from which any such Chinese shall depart from the United States shall, in person or by deputy, go on board each vessel having on board any such Chinese laborer and cleared or about to sail from his district for a foreign port, and on such vessel make a list of all such Chinese laborers, which shall be entered in registry-books to be kept for that purpose, in which shall be stated the name, age, occupation, last place of residence, physical marks, or peculiarities, and all facts necessary for the identification of each of such Chinese laborers, which



books shall be safely kept in the custom-house; and every such Chinese laborer so departing from the United States shall be entitled to, and shall receive, free of any charge or cost, upon application therefor, from the collector or his deputy at the time such list is taken, a certificate signed by the collector or his deputy and attested by his seal of office, in such form as the Secretary of the Treasury shall prescribe, which certificate shall contain a statement of the name, age, occupation, last place of residence, personal description, and facts of identification of the Chinese laborer to whom the certificate is issued, corresponding with the said list and registry in all particulars. In case any Chinese laborer, after having received such certificate, shall leave such vessel before her departure, he shall deliver his certificate to the master of the vessel, and if such Chinese laborer shall fail to return to such vessel before her departure from port, the certificate shall be delivered by the master to the collector of customs for cancellation. The certificate herein provided for shall entitle the Chinese laborer to whom the same is issued to return to and re-enter the United States upon producing and delivering the same to the collector of customs of the district at which such Chinese laborer shall seek to re-enter; and upon delivery of such certificate by such Chinese laborer to the collector of customs at the time of re-entry in the United States, said collector shall cause the same to be filed in the custom-house, and duly canceled.

**CHINESE LABORERS.**—By section 5 any Chinese laborer mentioned in section 4, being in the United States and desiring to depart by land, is entitled, free of charge, to a certificate of identification similar to that provided for in section 4 in case of such laborer desiring to leave by water.

Section 6 is as follows:

That in order to the faithful execution of Articles I and II of the treaty in this act before mentioned, every Chinese person other than a laborer who may be entitled by said treaty and this act to come within the United States, and who shall be about to come to the United States, shall be identified as so entitled by the Chinese Government in each case, such identity to be evidenced by a certificate issued under the authority of said Government, which certificate shall be in the English language, or (if not in the English language) accompanied by a translation into English, stating such right to come, and which certificate shall state the name, title, or official rank, if any, the age, height, and all physical peculiarities, former and present occupation or profession, and place of residence in China, of the person to whom the certificate is issued, and that such person is entitled, conformably to the treaty in this act mentioned, to come within the United States. Such certificate shall be *prima facie* evidence of the fact set forth therein, and shall be produced to the collector of customs, or his deputy, of the port in the district of the United States at which the person named therein shall arrive.

Section 7 subjects to a fine not exceeding \$1,000, and imprisonment for not more than five years, any person who shall make or knowingly use a fraudulent certificate.

Section 8 requires lists of Chinese passengers on vessels arriving at ports of the United States to be kept and delivered by masters of such vessels to collectors of customs.

By section 9 collectors are required to examine and compare certificates and lists.

Section 10 provides for the forfeiture to the United States of vessels violating the provisions of the act.

Section 11 declares that "any person who

shall knowingly bring into or cause to be brought into the United States by land, or who shall knowingly aid or abet the same, or aid or abet the landing in the United States from any vessel of any Chinese person not lawfully entitled to enter the United States, shall be deemed guilty of a misdemeanor, and shall, on conviction thereof, be fined in a sum not exceeding \$1,000, and imprisoned for a term not exceeding one year." Section 12 is as follows:

That no Chinese person shall be permitted to enter the United States by land without producing to the proper officer of customs the certificate in this act required of Chinese persons seeking to land from a vessel. And any Chinese person found unlawfully within the United States shall be caused to be removed therefrom to the country from which he came, by direction of the President of the United States, and at the cost of the United States, after being brought before some justice, judge, or commissioner of a court of the United States, and found to be one not lawfully entitled to be or remain in the United States.

Section 13 exempts from the provision of the act officers of the Chinese Government traveling on business of that Government, and makes their credentials equivalent to the prescribed certificate. The servants of such officers are also exempt. Section 14 declares that no State court or court of the United States shall admit Chinese to citizenship. By section 15 "Chinese laborers" as used in the act shall be taken to mean "both skilled and unskilled laborers, and Chinese employed in mining."

**JUDICIAL INTERPRETATION: CASE OF AH SING.**—The provisions of this law have been the subject of judicial interpretation in several important cases. In the case of Ah Sing, heard in the United States Circuit Court in California in August, 1882, by Justice Field, of the United States Supreme Court, and Circuit Judge Sawyer, it was held that the prohibition of the act does not apply to a Chinese seaman who shipped on an American vessel leaving the United States before the passage of the act, and returning from a foreign port after the act went into effect. The facts proved were that Ah Sing, a subject of the Emperor of China, had come to this country six years ago. On May 5, 1882, he shipped as a cabin waiter on the American steamer City of Sydney, which left San Francisco for a voyage to Australia and returned to San Francisco August 8th. The Act of Congress being then in force, the master of the vessel refused to land Ah Sing, whereupon the case was brought before the Circuit Court on a writ of *habeas corpus*. The law on this point was interpreted by Justice Field as follows:

We do not, however, find any difficulty in arriving at the meaning of the act. Its provisions are plain. The master of a vessel is prohibited from bringing within the United States, and landing or permitting to be landed, any Chinese laborer from any foreign port or place; and that means, from bringing any Chinese laborer embarking at a foreign port or place. The prohibition does not apply to the bringing of a laborer already on board of the vessel when it touches at a foreign port. When we speak of merchandise as



brought from a foreign port, the port of shipment is always understood, and not any intermediate port at which the vessel bringing the goods may have stopped. This is the common understanding of the terms by merchants, and is the interpretation given to them by the courts. They must be held to have the same meaning when used with reference to the importation of persons from a foreign port, as when used with reference to the importation of goods. The eighth section of the act confirms this view, if it needed any confirmation; that requires the master of the vessel to deliver a list of Chinese passengers "*taken on board* his vessel at any foreign port or place." It is the laborers thus taken on board that the master is prohibited from bringing into the United States.

Any other construction would compel a master of an American vessel, leaving a port of the United States with a Chinese seaman or waiter, to send him adrift at a foreign port, at which the vessel might touch, and prohibit the master from bringing him back in accordance with the bond which he is required by existing law to execute. (U. S. Revised Statutes, section 4,576.)

The object of the act of Congress was to prevent the further immigration of Chinese laborers to the United States, not to expel those already here. It even provides for the return of such laborers leaving for a temporary period, upon their obtaining certificates of identification. It was deemed wise policy to prevent the coming among us of a class of persons, who, by their dissimilarity of manners, habits, religion, and physical characteristics, can not assimilate with our people, but must forever remain a distinct race, creating by their presence enmities and conflicts, disturbing to the peace and injurious to the interests of the country. But it was not thought that the few thousands now here, scattered, as they must soon be, throughout all the States, would sensibly disturb our peace or affect our civilization.

This case is reported in 13 "Federal Reporter," 286.

**CASE OF AH TIE.**—In the case of Ah Tie and others, brought before the court at the same time, the facts were substantially the same, with one exception, as in the case of Ah Sing. Ah Tie and others were seamen on the same steamer during the same voyage. The distinction between the two cases was, that at Sydney the petitioners on several occasions, by permission of the captain, went ashore, and remained a few hours, without, however, intending to leave the service of the steamer. "This fact," said Justice Field, "is the only one distinguishing this case from that of Ah Sing. We there held that the prohibition upon the master of a vessel, contained in the Act of Congress, to bring within the United States from a foreign port or place any Chinese laborer, was intended to prevent the importation of such laborers from the foreign port or place—laborers who there embarked on the vessel—and did not apply to his bringing a Chinese laborer already on board of his vessel touching at the foreign port or place. We also held that, while on board the American vessel, the laborer was within the jurisdiction of the United States, and did not lose, by his employment, the right of residence here previously acquired under the treaty with his country.

"The status of the petitioners, and their relation to the vessel, were not changed in any respect by the fact that they were permitted

by the captain to land for a few hours at the port of Sydney. They were bound, by their contract of shipment, to return with the vessel; and the captain was bound to bring them back. He could not have forced them ashore in a foreign port; nor could he have abandoned them there. Had he done either of these things, he would have rendered himself liable to criminal prosecution. . . . A Chinese laborer on an American vessel can not be held to lose his residence here, so as to come within the purview of the act, by such temporary entry upon a foreign country as may be caused by the arrival of the vessel on her outward voyage at her port of destination, or her touching at any intermediate port in going or returning, or her putting into a foreign port in stress of weather. And we should hesitate to say that it would be lost by the laborer passing through a foreign country in going to different parts of the United States by any of the direct routes, though we are told by the counsel of the respondent that a Chinese laborer having taken a ticket by the overland railroad from this place to New York, by the Central Michigan route, which passes from Detroit to Niagara Falls through Canada, was stopped at Niagara and sent back, as within the prohibition of the Act of Congress, and on attempting to retrace his steps was again stopped at Detroit. A construction which would justify such a proceeding can not fail to bring odium upon the act, and invite efforts for its repeal. The wisdom of its enactment will be better vindicated by a construction less repellent to our sense of justice and right." (13 "Federal Reporter," 291.)

**CASE OF LOW YAM CHOW.**—In the case of Low Yam Chow (13 "Federal Reporter," 605), the essential facts were these: The petitioner was a Chinese merchant, and not a laborer. He was for ten years engaged in business in Peru, and afterward established himself at Panama. For the past five years he has also been a member of the mercantile firm of Chow, Kee & Co., in San Francisco. On July 31st he left Panama by steamer for San Francisco, where he arrived August 17th. He was not allowed to land, because he had no certificate. These facts raised two questions: First, whether Chinese merchants, who resided, on the passage of the Act of Congress, in other countries than China, on arriving on a vessel in a port of the United States, are required to produce certificates of the Chinese Government, establishing their character as merchants, as a condition of their being allowed to land; and, second, whether their character as such merchants can be established by parole proof. The Circuit Court of the United States in California decided the first of these questions in the negative, and the second in the affirmative. It holds that only laborers, and not merchants, are prohibited from entering the United States, and that a certificate is required only of those coming from their "place of residence in

China," as is prescribed by section 6 of the Act of Congress. After quoting this section, Justice Field says: "The certificate mentioned in this section is evidently designed to facilitate proof by Chinese other than laborers coming from China, and desiring to enter the United States, that they are not within the prohibited class. It is not required as a means of restricting their coming. To hold that such was its object, would be to impute to Congress a purpose to disregard the stipulation of the second article of the new treaty [November, 1880], that they should be 'allowed to go and come of their own free-will and accord.' Nor is it required, as a means of proving their character, from merchants and others not laborers, domiciled out of China when the law was passed, and coming here from such foreign jurisdiction. The particulars which the certificate must contain show that it was to be given to those then residing there, for their *place of residence in China* is to be stated. Independently of this consideration, that Government could not be expected to give, in its certificate, the particulars mentioned of persons resident—some, perhaps, for many years—out of its jurisdiction. Neither the letter nor the spirit of the act calls for a construction imputing to Congress the exaction of a condition so unreasonable. . . . Its purpose will be held to be, what the treaty [of November, 1880] authorized, to put a restriction upon the immigration of laborers, including those skilled in any trade or art; and not to interfere, by excluding Chinese merchants, or putting unnecessary and embarrassing restrictions upon their coming, with the commercial relations between China and this country. Commerce with China is of the greatest value, and is constantly increasing. And it should require something stronger than vague inferences to justify a construction which would not be in harmony with that treaty, and which would tend to lessen that commerce. It would seem, however, from reports of the action of certain officers of the Government—possessed of more zeal than knowledge—that it is their purpose to bring this about, and thus make the act as odious as possible.

"We are of opinion that the section requiring a certificate for Chinese merchants coming to the United States does not apply to those who resided out of China on the passage of the Act of Congress, and that proof of their occupation may be made by parol."

CASE OF GEORGE MONCAN AND AH KEE.—In the case of George Moncan and Ah Kee (14 "Federal Reporter," 44), United States District Judge Deady, of the Oregon District, held that a Chinaman who had shipped as a seaman on an American vessel, in a foreign port, before the passage of the Act of Congress, and reached a port of the United States after the act went into force, had a right to enter the country and remain; and he interpreted section 3 of the act which excepts from its prohibitory provisions a vessel "touching at any port of the

United States on its voyage to any foreign port or place; provided, that all Chinese laborers brought on such vessel shall depart with the vessel on leaving port." It appeared that Moncan had shipped as cook on the American vessel Patrician, at London, in March, 1882, which was before the passage of the act. The vessel went to Yokohama, Japan, where, on September 11th—after the law went into effect—Moncan was made steward and Ah Kee was taken on as cook. It then proceeded to Astoria, Oregon, which port it reached in October, and there took on a load of wheat for Europe. Moncan and Kee, being forbidden to land, appealed to the court to define their rights. On these facts the law was interpreted by Judge Deady as follows:

Counsel for the Chinese contends: 1. That under the circumstances the Patrician is a vessel "touching" at a port of the United States "on its voyage" to a foreign one, and therefore within the exception contained in section 3 of the act; and, 2. That the crew of a vessel arriving at a port of the United States from a foreign port or place, in the ordinary course of commerce and navigation, are not "laborers" within the meaning of the act.

When the Patrician entered the Columbia River, the *terminus ad quem*, or place of termination of her voyage, was not definitely known. It might be either in Europe or the United States; and, so far as now known, it is in the former. But even so long as it might be in either country, I think she ought to be for the purpose of this act considered as on a voyage to a foreign port. But it is certain that her port of final destination was not Astoria, at which place she merely called for orders. Nor had the voyage then terminated as to the steward and cook, whose engagements were for twenty-four months each from the date of signing the articles, unless sooner discharged.

The word "touching" is evidently used in the act to signify the opposite of "staying." And it does not apply to the case of a compulsory entrance on account of distress or stress of weather, for that is specifically provided for. A vessel does not ordinarily touch at her home port, but remains there until a new voyage is undertaken. But in course of a trading-voyage, from England to Asia and back to Europe or the United States, she may touch at many ports and for many purposes. Calling at a port for orders is, in my judgment, a plain case of "touching" at such port; and if, in pursuance of the order obtained, or being there, the vessel remains long enough to take in a cargo for a foreign port, I see no reason, under the circumstances, for concluding that she is henceforth "staying" but not "touching" at such port. Upon this view of the case, the Patrician has simply touched at this port. Her stay here is only temporary and for an object necessary to enable her to prosecute her voyage to a foreign port with profit to her owners. Nor do I think that the Chinese members of the crew of the Patrician are laborers within the meaning of this act. True, their vocation is labor; but they are not brought here to remain and enter into competition with the labor of the inhabitants of the country. . . .

It is not to be supposed for a moment that Congress intended by the passage of this act to impede or cripple commerce with China by prohibiting, in effect, all vessels engaged in the carrying-trade to and from the United States, and particularly those on the Pacific coast, from employing Chinese cooks, stewards, or crews, when for any reason it is necessary or convenient to do so; for such would necessarily be the result of holding that the Chinese crew of a vessel coming from a foreign port to one of the United States



are "laborers" within the meaning of the act. . . . Of course a Chinese seaman, although allowed to come into the ports of the United States as one of the crew of a vessel from a foreign port, does not thereby obtain the right to remain in the country and become a laborer therein; and if the master allows him to go ashore permanently, the latter would be liable to removal, and the former to the punishment prescribed in section 2 of the act. But such seaman would have the same right to be on the shore temporarily and not otherwise employed than in the business of the vessel during her stay in port, as those of other nationalities.

As to Moncan, the court held that he had a right not only to land, but to remain permanently, for the reason that he had joined an American ship prior to the passage of the act, and remained on her until his arrival here. This was in accordance with the view expressed by Justice Field in the case of Ah Sing, that "an American vessel is deemed to be a part of the territory of the State within which its home port is situated, and as such a part of the territory of the United States; the rights of its crew are measured by the laws of the State or nation, and their contracts are enforced by its tribunals."

**CASE OF HO KING.**—It was held by Judge Deady, in the case of Ho King (14 "Federal Reporter," 724), that a Chinese actor is not a laborer, and is therefore entitled to enter the United States on satisfactory evidence of his professional character. "The term 'laborer,'" said Judge Deady, "is used in the supplementary treaty with China, of November 17, 1880, and also of the act of May 6, 1882, by section 15 of which it is made to include 'both skilled and unskilled laborers,' in its popular sense, and includes only persons who perform physical labor for another for wages. It does not, therefore, include an actor any more than it does a merchant or teacher. . . . Neither the treaty nor the act has in view the protection of what are called the professional or mercantile classes, or those engaged in mere mental labor, from competition with the Chinese. No grievance of this kind was ever complained of, and the language of the remedy provided plainly indicates that it was not contemplated by either of the parties to the treaty, or the Congress that passed the act."

In this case Judge Deady further decided that any Chinese non-laborer entitled to come to this country may enter without the certificate prescribed by section 6 of the act, provided he gives satisfactory proof that he is not a laborer, and a satisfactory explanation why he has no certificate. On this point the court said:

In the case of Low Yam Chow (13 "Federal Reporter," 605, also given above) it was held by Justices Field and Hoffman that Chinese not laborers, who, at the passage of the act, did not reside in China, were not required to produce this certificate to prove they were non-laborers prior to being allowed to land. The reasoning by which this conclusion is reached, would justify the conclusion that the certificate is not absolutely necessary in any case. The non-laboring classes of Chinese are still entitled by treaty stipulation to come to and reside in the United States, and to en-

joy all the "rights, privileges, immunities, and exemptions" which may be accorded to "the citizens and subjects of the most favored nation" (treaty of November 17, 1880).

If section 6 of the act of 1882 is construed to absolutely require the production of the certificate therein provided for, before a Chinaman who is not a laborer can come within the United States, then it will operate as a serious restriction upon the right and privilege given him by the treaty, because in this respect no such condition or restriction is imposed upon the subject of any other nation. Indeed, the fact of being compelled to make proof of his condition or character at all is a burden and inconvenience upon the Chinese coming to the United States, which is not required of any other immigrant or visitor coming to this country. But probably this much is unavoidable under the circumstances, and must be submitted to as a necessary incident of the right of the United States, under the amended treaty, to exclude from the country Chinese laborers. . . .

Read, then, in the light of the treaty, and considered as an aid rather than an impediment to its enforcement, section 6 ought to be construed as a declaration on the part of the United States that, for the purpose of facilitating the entry into the country of the Chinese not within the prohibition, it will accept the certificate of the Chinese Government that the bearer is not a laborer, and is *prima facie* entitled under the treaty to come into the United States at pleasure; but that, in the absence of such certificate, a Chinaman claiming the right to enter and reside in the United States must establish the fact that he is not a laborer by evidence, as in ordinary cases of the *ex parte* proof of a fact.

But the non-production of a certificate, unless satisfactorily explained, may raise the presumption that the claimant is one of the prohibited class. In the case under consideration, Ho King explained that, when he left China, it was his purpose to go to Honolulu, and that he had no intention of coming to the United States. This was considered by the court as a satisfactory explanation of why he had no certificate.

This view of the law was also taken by Chief-Justice Greene, of Washington Territory, in the case of Lee Yip, decided near the close of 1882.

**TRANSIT OF CHINESE LABORERS.**—The important question was raised during the year, but was not brought before any court, whether Chinese laborers are entitled to enter and pass through the United States on their way from one foreign country to another. It was represented that there were from 40,000 to 50,000 Chinese laborers in the West Indies whose contracted term of service there was about to expire, and who wanted to return to China by way of the United States. On this question Attorney-General Brewster gave two conflicting opinions. In the first, dated July 18th, and given to Secretary Folger, he held that the coming of all laborers to the United States was prohibited by the act, whether they came to remain or simply to pass through the country. In the second, dated December 26th, and given to Secretary of State Frelinghuysen, he held that the prohibition of the act does not extend to Chinese laborers desiring to cross the United States from one foreign country to another. "My first opinion on this subject," writes Mr.



Brewster to Mr. Frelinghuysen, "was given under circumstances somewhat too urgent, pressed as I was by your department, because it was pressed by others, and I am gratified to have an opportunity to reconsider my former conclusions with care." The Attorney-General then proceeds as follows:

The preamble of the act is in these words: "Whereas, in the opinion of the Government of the United States, the coming of Chinese laborers to this country endangers the good order of certain localities within the territory thereof." The first section enacts "that from and after the expiration of ninety days next after the passage of this act, the coming of Chinese laborers to the United States be, and the same is hereby, suspended; and during such suspension it shall not be lawful for any Chinese laborer to come, or, having so come after the expiration of said ninety days, to remain within the United States."

The treaty stipulations referred to in the title of the act are those contained in the treaty between this country and China, bearing date the 17th of November, 1880, which is twice referred to in the body of the act.

The preamble of the treaty recites that the necessity for "a modification of existing treaties" has arisen in consequence of the *increasing immigration of Chinese laborers*, and the embarrassments caused by such *immigration*. The first article provides that "whenever in the opinion of the Government of the United States the coming of Chinese laborers to the United States, or their residence therein, affects or threatens to affect the interests of that country, or of any locality within the territory thereof, the Government of China agrees that the Government of the United States may regulate, limit, or suspend such coming or residence, but may not absolutely prohibit it. The limitation or suspension shall be reasonable, and shall apply only to Chinese who may go to the United States as *laborers*, other classes not being included in the limitations. Legislation taken in regard to Chinese laborers will be of such a character only as is necessary to enforce the regulation, limitation, or suspension of immigration; and immigrants shall not be subject to personal maltreatment or abuse."

There can be no doubt that the Act of Congress now under consideration was intended to carry into effect the stipulation in this article that the Government of the United States might suspend immigration of Chinese laborers to this country. But, in applying the statute, a serious doubt has arisen as to whether it was the intention of Congress to prohibit all persons answering to the description of Chinese laborers and not embraced by the exceptions in the third section, who should come to our shores merely for the purpose of going through the country on their way to China, or only such portions of that class, not coming within the said exceptions, as should come here to seek occupation as laborers.

The preamble of the act, stating that in the opinion of the Government "the coming of Chinese laborers to this country endangers the good order of certain localities within the territory thereof," would seem to have exclusive reference to the Chinese laborer as a dweller in our midst and a competitor with our own laboring classes, for it is in this way only that he is a disturbing element, and not to him as a passenger over our territory, in which character he has never been objectionable. The statute, being in pursuance of the treaty, must be construed as in harmony with it, and as intending to suspend only the coming of Chinese laborers in the way contemplated by the treaty. Upon reference to the provisions of the treaty already referred to and quoted, we find that it is as immigrants into this country that Chinese laborers are dealt with, and that the right of the United States to suspend the coming of such persons is confined to cases in which they come as "*laborers*." Looking, then, at the mischief to which the act was directed and the language

of the treaty, I do not think that a Chinese laborer coming to this country merely to pass through it can be considered as within the prohibition of the law, he being neither an immigrant nor a laborer coming here *as a laborer*.

As the prohibition of the act applies to Chinese laborers coming into the country to stay as *laborers*, and as the regulations touching certificates of identification prescribed by the fourth and sixth sections are ancillary to that end and intended to prevent frauds upon the act, and applicable therefore to Chinese coming here for permanent or temporary residence, I am of opinion that Chinese passing through the country to other countries are not required, before crossing our borders, to produce the specified certificates of identification, provided they competently prove, in some other manner, their status as mere transient passengers; of course, the certificates would dispense with the proof. The character of such proof may very properly be regulated by the Secretary of the Treasury.

**OTHER IMMIGRATION ACTS.**—Two other important laws relating to immigration were passed by Congress during the year. The act of August 2d regulates the carriage of alien passengers by sea with the view of promoting their health, comfort, and safety. It prescribes regulations as to their food, drinking-water, treatment, etc., and as to the space, light, ventilation, etc., of immigrant-vessels.

The act of August 3d imposes a tax of fifty cents on every immigrant brought to the United States. The tax is to be paid to the collector of the port by the master or owner of the vessel bringing the immigrants. The money thus collected is to be paid into the Treasury of the United States, and "shall be used, under the direction of the Secretary of the Treasury, to defray the expense of regulating immigration under this act, and for the care of immigrants arriving in the United States, for the relief of such as are in distress, and for the general purposes and expenses of carrying this act into effect." The Secretary of the Treasury is empowered "to enter into contracts with such State commission, board, or officers, as may be designated for that purpose by the Governor of any State, to take charge of the local affairs of immigration within said State."

Pursuant to this law, arrangements were made by the Secretary of the Treasury, with the New York Board of Emigration, for continuing at the port of New York the work which the board has carried on at the expense of the State since the head-tax levied by the State was declared unconstitutional by the United States Supreme Court.

**INDEBTEDNESS OF THE UNITED STATES, OF THE STATES, AND OF THE WORLD.** It is not a rash assertion to declare that the political organizations of the world are bankrupts, and that civil government on the part of mankind is at the present moment a financial failure. The population of the earth is estimated at 1,433,887,600, and the national debts of the principal countries of the world amount to \$23,286,414,753, which is nearly twenty dollars for every man, woman, and child now living on the earth. This immense















sum of indebtedness is to be raised by taxation of the inhabitants of the indebted countries, and paid out through the national treasuries.

Of this vast sum, the total net indebtedness of the United States is \$2,997,000,000, of which \$1,942,000,000 is public debt, and \$1,055,000,000 belongs to the States, counties, townships, school districts, and municipalities.

A want of space will only permit here some brief notes of the origin, progress, and present condition of these classes of indebtedness of the United States, and of the indebtedness of the other countries of the world. The full details belong to the census of 1880, and have been very carefully compiled by Rafael A. Bayley and others, under the direction of Robert P. Porter.

**FIRST LOANS.**—The indebtedness of the United States began with the war of the Revolution. The sympathy of France with the American cause led both the Government and people to contribute to its success. As early as September, 1775, Caron de Beaumarchais, an ardent patron of the cause, addressed a memorial to the King on the subject. This was followed by others, in which he urged that it would be impossible for Great Britain to subdue the colonies, if they were assisted in their struggle; that if not assisted, they might succumb, join the English, and turn their arms against France. He says: "We are not in a fit state for making war. We must prepare ourselves, keep up the contest, and, with that view, send secret assistance in a prudent manner to the Americans." These memorials led the Government to determine to give the assistance, and to employ their author as its agent. In the spring of 1776 he was sent to London to make the arrangements, as there was no American agent in France. In London he was introduced to Arthur Lee, a law-student in the Temple, who bore some kind of commission from the secret committee of Congress. Beaumarchais informed him that the French Government wished to send 200,000 louis-d'or (equal to \$816,750) in arms, ammunition, and specie, for the assistance of the Americans, but in a secret manner, and that all they wanted was to know through what source it was best to make the remittances. Beaumarchais then returned to Paris, and about July 1, 1776, Silas Deane arrived there, with full powers as a political and commercial agent for the United States in France. His instructions were to obtain, if possible, one hundred cannon, with ammunition; also arms and uniforms for 25,000 men. These Beaumarchais contracted to furnish *from the arsenals of France*, in addition to a large amount of other articles thought needful for the supply of the colonies. Deane, on his part, agreed that the United Colonies should pay for them by remittances of American produce, the business to be transacted by Beaumarchais, under the name of the Spanish firm of Roderigue, Hortales & Co. This contract, with its

accompanying letters, appears on its face to be perfectly regular; an ordinary commercial contract, by which the United Colonies were to receive the supplies they needed, and to pay for the same within one year by shipments of produce to the imaginary firm of Roderigue, Hortales & Co. Had it been what it appears to be, the United Colonies would have been bound in common honesty not only to pay in full for the stores, but to pay dearly for the risks to which the contractor would be exposed. But there is evidence that both parties knew the contract as it stood to be but a sham, drawn up to mask the fact that it was the Government of France which was to supply England's rebellious colonies. The first million of livres was then advanced from the French treasury, and a few days afterward another million was received from the Spanish treasury, as both countries were united in their foreign policy. As shipments went on, and remittances came slowly from America, a third million was contributed by the King of France. Subsequently two million livres more were granted by France in 1777, and in 1781 six millions, making a total of ten millions, of which Beaumarchais received two, and the rest was paid through Benjamin Franklin. Thus the French and Spanish subsidy amounted to eleven million livres; equal to \$1,996,500. As this money was a free gift, it has not been repaid, unless the sums paid to Beaumarchais be taken as a partial reimbursement.

The first loan negotiated by the Continental Congress was obtained in the year 1777 from the "Farmers-General of France." It amounted to 1,000,000 livres, and was partly repaid with tobacco, and finally settled with the French Government. The next loan was 18,000,000 livres from the French Government. It is probable that it was, in its inception, not so much a loan as a subsidy, a payment of 750,000 livres every three months to the American commissioners in France, to enable the colonies to keep up the unequal struggle with Great Britain. The money was advanced without an expectation of repayment, though with a stipulation that it should be repaid.

A loan from Spain in 1781 is mentioned, but little is known of it. In making up a statement of the foreign debt after the adoption of the Constitution, it appeared that a small sum was due Spain for advances of money, which amounted to \$174,011.

**FINANCIAL SITUATION.**—The financial situation of the Continental Congress was at its worst in 1779 and 1780. Over \$200,000,000 in Continental currency had been issued, and this currency, at first circulating readily at its face value, had depreciated as the amount issued increased, until it only passed at forty to one. Even at this discount it soon ceased to circulate at all, and in the year 1780 "it quietly expired in the hands of its possessors." The army was reduced to extremity. In 1778

nearly 4,000 men were returned as unfit for duty from want of clothes. In January, 1780, the army had been nearly three months on a short allowance of bread. It was determined to attempt to negotiate a loan in Holland. Applications for loans in that country had hitherto been unsuccessful. The Hollanders either distrusted the security, or were unwilling to incur the resentment of Great Britain by lending the Americans money to enable them to carry on the war. The King of France had, through his minister at the Hague, offered his assistance to the Americans in procuring loans in that country, but without effect. He now engaged to become, himself, responsible for the sums which might be furnished. In consequence of this, and the exertions of Mr. Adams, a loan of 10,000,000 livres was obtained in Holland. Although intended solely for the United States, this money having been obtained on the credit of France, became a debt due to that country.

The loan of 10,000,000 livres obtained from France in 1781 was soon exhausted; very little of it in cash ever reached the United States; one half of it was immediately paid into the French Treasury for supplies previously furnished. So utterly exhausted was the American Treasury that in 1782, when, peace having become a certainty, it was determined to reduce the army, the utmost difficulty was experienced in obtaining a small sum to pay the discharged soldiers enough to take them to the places of their enlistment. Congress therefore resolved to make new efforts for a loan, both in France and Holland. As a result, the King of France determined, "notwithstanding the pressing necessities of his own service, to grant to Congress a new pecuniary assistance, which he fixed at the sum of 6,000,000 livres Tournaix (\$1,089,000). This was in February, 1783, and the money was advanced in twelve monthly payments.

**THE AID OF FRANCE.**—On the settlement of the account with France, it appeared that the amount received from her during the war of the Revolution, in the way of loans and subsidies, was 45,000,000 livres, equivalent to \$8,167,500.

"If the gold of France aided the United States through the war in which independence was obtained, it was from Holland that the money came which assisted the Government through the difficult years of peace that followed."\*

An attempt to negotiate a loan in Holland was commenced in 1780, but continued unsuccessful until the result of the war was apparent, and the independence of the country had been acknowledged in Europe, when 5,000,000 guilders (\$2,000,000) were obtained in 1782.

Another loan, of 1784, was rendered necessary by the slow progress made in realizing on the previous loan. A "bonus and gratifica-

tions" were given in this instance, by which the United States agreed, for a principal of 2,000,000 guilders received, to return 2,891,800. Although Mr. Adams, the American agent, thought the contract "involved an enormous sacrifice," yet it amounted to less than 6½ per cent annual interest. He had been authorized by Congress to pay 6 per cent.

**EFFECTS OF THE FINANCIAL CONDITION ON THE GOVERNMENT.**—The next loan, that of 1787, appears to have been contracted in order to raise money with which to pay the interest on the previous loans in Holland made in 1782 and 1784. The interest which had before fallen due had been paid, partly by remittances from America, and partly by some portions of the amount received on the original loans. Although the vast amounts of paper money which had been issued had become greatly depreciated, yet a new emission had been made, which, on its face, was redeemable by the different States individually, but indorsed by the United States, and was by act of March 18, 1780, to be issued at a not greater rate than one dollar of the new for each twenty of the old. Such imposts and duties as the Continental Congress was able to command or persuade from the States, were mostly paid in this new currency, which, being worthless abroad, rendered the payment of debts due in foreign countries by Congress a difficult matter. "It was the financial difficulties experienced under the old system of government that, more than anything else, brought about the calling of the convention which, in 1787, framed the present Constitution of the United States. The Continental Congress possessed sufficient authority to carry on war, to make peace, to conclude treaties, and to carry on most of the functions of government; but to do all this required a revenue, and for this they were dependent on the will of the States. It was evident that such a system could not last. At the time Mr. Adams began the negotiations for the loan, delegates to the Constitutional Convention had been chosen in most of the States, and the convention was in session before the loan was completed."\* This loan was for 1,000,000 florins for ten years at 5 per cent. The United States received ninety-two guilders for each hundred of obligation.

**THE NEW CONSTITUTION.**—The next loan, of 1788, was to meet the expenses in Europe, and to afford a financial basis on which to start the new government at home. It was known in Europe, early in 1788, that the new Constitution would be ratified, and as the Continental Congress was entirely without funds to turn over to its successors, money must be provided in some way. This loan was for one thousand guilders for ten years, at 5 per cent.

At this period, the Government of the United States was reorganized under the present form, and went into operation on April 30, 1789. The 4th of March is the constitutional

\* "National Loans of the United States from July 4, 1776, to June 30, 1880." By Rafael A. Bayley, Treasury Department.

\* "National Loans of the United States from July 4, 1776, to June 30, 1880." By Rafael A. Bayley, Treasury Department.



day, but at this time it was found impossible to get the members of Congress together on that day. A Treasury Department was created, and Alexander Hamilton appointed the secretary. There was a debt of millions to be provided for, and not a dollar on hand even to meet current expenses. The measures by which to raise a revenue from an exhausted country were to be devised and put in operation, and a financial system prepared which should promise to conduct the Government to independence and financial strength.

**SYSTEM ADOPTED.**—The first step taken was to lay duties on imports, which was approved on July 4, 1789, but no revenue was obtained until September. The next step was to obtain temporary loans from banks in New York. For the year 1789 the expenditures were estimated at \$8,285,603, the greater portion of which was for principal and interest due on the foreign and domestic debt. The current expenses of the year were estimated at \$630,101. No payments on the debt were made during the year, except interest on the Holland loans. No way of relief was open but to audit or adjust the details of the debt and fund them on longer bonds. For this object money was required. Congress, therefore, passed an act appropriating any surplus revenue to payment of the debt, and authorizing a loan of \$12,000,000 to apply on the foreign debt, and a further loan of \$2,000,000 to be applied to purchase the debt.

**THE DEBT.**—The following is a statement of the debt of the United States at the organization of the present form of government, including arrearages of interest to January 1, 1790:

French loan of 18,000,000 livres.....	\$8,267,000 00
French loan of 10,000,000 livres.....	1,815,000 00
French loan of 6,000,000 livres.....	1,089,000 00
Loan from Farmers-General of France, balance due.....	153,688 89
Loan from Spain in 1781.....	174,017 13
Holland loan of 1782.....	2,000,000 00
Holland loan of 1784.....	800,000 00
Holland loan of 1787.....	400,000 00
Holland loan of 1788.....	400,000 00
Total principal of foreign debts.....	\$10,098,706 02
Balance due France for military supplies.....	24,332 86
Arrearages of interest to January 1, 1790.....	1,760,277 03
Debt due foreign officers who had served in the war of the Revolution.....	156,988 73
Arrearages of interest to January 1, 1790.....	11,219 82
Principal of the domestic debt, estimated.....	28,858,180 65
Arrearages of interest to January 1, 1790, estimated.....	11,398,621 80
	52,338,326 51
Add to this arrears and claims against the late government outstanding and subsequently discharged.....	450,895 52
Making the total debt of the United States, January 1, 1790.....	\$52,788,722 03

To this should be added the individual debts of the several States, the precise amount and character of which was then unknown, estimated by Hamilton at that time to aggregate about \$25,000,000.

There were two kinds of debt in the adjustment of which there seems to have been no difficulty: One was the undisputed foreign

debt, where the lenders had paid for their bonds in gold, on the faith of the Continental Congress; the other was the paper money issued by Congress and the several States.

Authorities vary much as to the amount of paper money issued during the struggle for independence. Possibly Mr. Jefferson's statement in his writings may be taken as approximate to the truth, and it affords, at the same time, a striking exhibit of the effects of the inflation of our paper currency:\*

On the commencement of the late Revolution Congress had no money. The external commerce of the States being suppressed, the farmer could not sell his produce, and, of course, could not pay a tax. Congress had no resource then but in *paper money*. Not being able to lay a tax for its redemption, they could only promise that taxes should be laid for that purpose, so as to redeem the bills by a certain day. They did not foresee the long continuance of the war, the almost total suppression of their exports, and other events which rendered the performance of their engagements impossible. The paper money continued for a twelvemonth equal to gold and silver; but the quantities which they were obliged to emit, for the purpose of the war, exceeded what had been the usual quantity of the circulating medium.

It began, therefore, to become cheaper, or, as we expressed it, it depreciated, as gold and silver would have done had they been thrown into circulation in equal quantities. But not having, like them, an intrinsic value, its depreciation was more rapid and greater than could ever have happened with them. In two years it had fallen to two dollars of paper money for one of silver; in three years to four for one; in nine months more it fell to ten for one; and in the six months following, that is to say, by September, 1779, it had fallen to twenty for one.

Congress, alarmed at the consequences which were to be apprehended should they lose this resource altogether, thought it necessary to make a vigorous effort to stop its further depreciation. They therefore determined, in the first place, that their emissions should not exceed \$200,000,000, to which sum they were then nearly arrived, and though they knew that twenty dollars of what they were then issuing would buy no more for their army than one silver dollar would buy, yet they thought it would be worth while to submit to the sacrifice of nineteen out of twenty dollars if they could thereby stop further depreciation. They, therefore, published an address to their constituents, in which they renewed their original declarations that this paper money should be redeemed at dollar for dollar. They proved the ability of the States to do this, and that their liberty would be cheaply bought at this price. The declaration was ineffectual. No man received the money at a better rate. On the contrary, in six months more, that is, by March, 1780, it had fallen to forty for one. Congress then tried an experiment of a different kind. Considering their former offers to redeem this money at par as relinquished, by the general refusal to take it but in progressive depreciation, they required the whole to be brought in, declared it should be redeemed at its present value of forty for one, and that they would give to the holders new bills, reduced in their denomination to the sum of gold or silver which was actually to be paid for them. This would reduce the nominal sum of the mass in circulation to the present worth of that mass, which was five millions, a sum not too great for the circulation of the States, and which they therefore hoped would not depreciate further, as they continued firm in their purpose of emitting no more. This effort was as unavailing as the former. Very little of the money was brought in.

It continued to circulate and to depreciate till the

\* Jefferson's "Works," vol. ix, p. 248.



end of 1780, when it had fallen to seventy-five for one; and the money circulated from the French army being, by that time, sensible in all the States north of the Potomac, the paper ceased its circulation altogether in those States. In Virginia and North Carolina it continued a year longer, within which time it fell to one thousand for one, and then expired, as it had done in the other States, without a single groan. Not a murmur was heard on this occasion among the people. On the contrary, universal congratulations took place on their seeing this gigantic mass, whose dissolution had threatened convulsions which should shake their infant Confederacy to its center, quietly interred in its grave.

Mr. Jefferson estimates the value of the two hundred millions of Continental currency at the time of its emission at \$36,367,719 in specie, and says: \* "If we estimate at the same value the like sum of \$200,000,000 supposed to have been emitted by the States, and reckon the Federal debt, foreign and domestic, at about \$43,000,000, and the State debts at \$25,000,000, it will form an amount of \$140,000,000, the total sum which the war cost the United States. It continued eight years from the battle of Lexington to the cessation of hostilities in America. The annual expense was therefore equal to about \$17,500,000 in specie."

The foreign loans now contracted, practically to pay and to refund portions of the debt, were as follow: Holland loan, 1790; the same, March, 1791; the same, September, 1791; the same, December, 1791; the same, 1792; the same, 1793; the same, 1794; Antwerp loan, 1791. Of the \$9,400,000 thus borrowed, over \$3,000,000 was paid into the Treasury of the United States and used in buying up the domestic debt, under the operations of the sinking fund; the balance was used to pay the debt due to Spain, debts due to foreign officers who served in the armies of the Revolution, and a large portion in paying off a part of the debt due to France.

**ASSUMPTION OF STATE DEBTS.**—The individual debts of the several States were contracted partly in defending themselves against the common enemy, partly in carrying on their governments, or in undertakings with which the rest of the country had nothing to do.

A proposition was now made for the Federal Government to assume these debts, and thus add them to the amount of its indebtedness. The following considerations were urged by the Secretary of the Treasury, Alexander Hamilton, as inducements to the assumptions:

1. To consolidate the finances of the country and give an assurance of permanent order in them; avoiding the collision of thirteen different and independent systems of finance under concurrent and co-equal authorities, and the scramblings for revenue which would have been incident to so many different systems.

2. To secure to the Government of the Union, by avoiding those entanglements, an effectual command of the resources of the Union for present and future exigencies.

3. To equalize the condition of the citizens of the several States in the important article of taxation; rescuing a part of them from being oppressed with

burdens beyond their strength on account of extraordinary exertions in the war, and through the want of certain adventitious resources which it was the good fortune of others to possess.

When the bill to authorize the assumption of the State debts was before Congress, it became combined with a bill to fix a seat of government. Each had failed by small majorities. There was a strong sectional party for each, but not a majority. The Eastern and Middle States were for the assumption, but the Southern States were against it. These latter were for the Potomac for the seat of government, and the former for the Susquehanna. The discontent was extreme on each side at losing its favorite measure. At last the measures were combined. Two members from the Potomac who had voted against the assumption agreed to change their votes; a few from the Eastern and Middle States who had voted against the Potomac agreed to change in its favor, and so the two measures were passed. But the account of this arrangement, by President Jefferson, omitting his strictures, deserves to be stated:

This measure (the assumption) produced the most bitter and angry contest ever known in Congress, before or since the union of the States. I arrived in the midst of it: but a stranger to the ground, a stranger to the actors in it, so long absent as to have lost all familiarity with the subject, and, as yet unaware of its object, I took no concern in it. The great and trying question, however, was lost in the House of Representatives. So high were the feuds excited on this subject that, on its rejection, business was suspended. Congress met and adjourned from day to day without doing anything, the parties being too much out of temper to do business together. The Eastern members threatened secession and dissolution. Hamilton was in despair. As I was going to the President's one day I met him in the street. He walked me backward and forward before the President's door for half an hour. He painted pathetically the temper into which the Legislature had been wrought—the disgust of those who were called the creditor States—the danger of the secession of their members, and of the separation of the States. He observed that the members of the Administration ought to act in concert—that though this question was not of my department, yet a common duty should make it a common concern—that the President was the center on which all administrative questions ultimately rested, and that all of us should rally around him, and support with joint efforts measures approved by him; and that the question having been lost by a small majority only, it was probable that an appeal from me to the judgment and discretion of some of my friends might effect a change in the vote, and the machine of government, now suspended, might be again set in motion. I told him that I was really a stranger to the whole subject; that not having yet informed myself of the system of finances adopted, I knew not how far this was a necessary sequence; that undoubtedly, if its rejection endangered a dissolution of the Union at this incipient stage, I should deem that the most unfortunate of all consequences, to avert which all partial and temporary evils should be yielded. I proposed to him, however, to dine with me the next day, and I would invite another friend or two, bring them into conference together, and I thought it impossible that reasonable men, consulting together coolly, could fail, by some mutual sacrifices of opinion, to form a compromise which would save the Union. The discussion took place. I could take no part in it but an exhortatory one, because I was a stranger to the circumstances

\* Jefferson's "Works," vol. ix, p. 260.



which should govern it. But it was finally agreed that whatever importance had been attached to the rejection of this proposition, the preservation of the Union, and of concord among the States, was more important, and that therefore it would be better that the vote of rejection should be rescinded—to effect which some members should change their votes. But it was observed that this pill would be peculiarly bitter to the Southern States, and that some concomitant measure should be adopted to sweeten it a little to them. There had before been propositions to fix the seat of government either at Philadelphia, or at Georgetown on the Potomac; and it was thought that by giving it to Philadelphia for ten years, and to Georgetown permanently afterward, this might, as an anodyne, calm in some degree the ferment which might be excited by the other measure alone: so two of the Potomac members (White and Lee, but the former with a revulsion of stomach almost convulsive) agreed to change their votes; and Hamilton undertook to carry the other point.

Thus, on August 4, 1790, an act, making provision for the payment of the debt of the United States and embodying provisions for assumption of the State debts, was approved. The following statement, taken from the official reports, shows the amount authorized to be assumed in the redemption of the debt of each State, and the amount which was assumed:

STATES.	Amount authorized.	Amount assumed.
New Hampshire.....	\$300,000 00	\$282,593 51
Massachusetts.....	4,000,000 00	3,951,733 05
Rhode Island.....	200,000 00	200,000 00
Connecticut.....	1,600,000 00	1,600,000 00
New York.....	1,200,000 00	1,183,716 69
New Jersey.....	800,000 00	695,202 70
Pennsylvania.....	2,200,000 00	777,938 43
Delaware.....	200,000 00	59,161 65
Maryland.....	800,000 00	517,491 03
Virginia and Kentucky..	3,500,000 00	2,984,416 00
North Carolina.....	2,400,000 00	1,798,303 85
South Carolina.....	4,000,000 00	3,999,651 73
Georgia.....	300,000 00	246,030 73
Total.....	\$21,500,000 00	\$18,271,786 47

U. S. BANK.—The public debt on January 1, 1791, was about \$75,250,000. A portion of it having been funded, and payable at future dates, the next step was taken to make additional provision for temporary emergencies. Accordingly, on December 14, 1790, Secretary Hamilton, with his annual report, transmitted to the House of Representatives a plan for a National Bank with a capital of \$10,000,000, divided into 25,000 shares, at \$400 each. The bill of incorporation passed the Senate on January 20, 1791. Debate on it in the House began on February 1st, and continued until February 8th, when the bill passed by yeas 39 to nays 20. The corporation was allowed to sell the evidences of the public debt subscribed to its stock, but was not to purchase any public debt whatever. Notes were allowed to be issued, payable to any person or persons, assignable and negotiable, or to bearer, assignable by delivery. The directors were to establish offices, for discount and deposit only, wherever they should think fit in the United States. The President of the United States was authorized to subscribe to the stock of the corporation \$2,000,000, borrowing an equal

sum of the bank, the money to be paid out of that which should be obtained under previous acts of Congress, relating to the public debt. The charter was to expire March 4, 1811. The bank was of great benefit to the Government. More than \$100,000,000 of Government money was received and disbursed by it, without the loss of a dollar. It made semi-annual dividends, averaging about  $8\frac{1}{2}$  per cent, and its stock rose to a high price.

At the close of 1792 the condition of the Treasury was unsatisfactory. The expenditures had increased in consequence of Indian troubles, the large amounts required for interest, and the growing current expenses seemed likely to exhaust the revenues. The House, therefore, referred to the Secretary of the Treasury the subject of a plan for the redemption of the public debt, and for the reimbursement of the subscription loan made to the bank. He replied by recommending for the first, temporary loans and additional revenues by taxation as the only resources remaining; and, for the second, that power be given to borrow the sum due, to be applied to the reimbursement of the loan.

WAR MEASURES.—A series of loans followed. Trouble arose with the Barbary powers on the north coast of Africa, in 1794, and an attempt was made to create a small navy of six frigates, four of forty-four guns and two of thirty-six guns each, for the protection of American commerce in the Mediterranean. These frigates were begun under many disadvantages—one each at the ports of Portsmouth, in New Hampshire, Portsmouth, in Virginia, Boston, New York, Philadelphia, and Baltimore. The timber from which they were to be constructed was still standing in the forest, the iron was still in its native ore, the seed for the flax and hemp was yet to be sown. Copper could not be procured in the United States. The Government possessed neither navy-yards nor cannon-foundries. It was resolved to build the ships of live-oak, and agents, with a force of lumbermen, were sent to Georgia to obtain it. They met with so many discouragements from the unhealthiness of the climate, the constant rain, and other causes, that little progress was made. In January, 1796, the frigates remained unfinished, and peace had been concluded with the Barbary powers. In 1797 the vessels were still on the stocks, but, owing to troubles with France, it was resolved to complete the frigates, to build galleys for the defense of the coast, and to purchase not more than twelve merchant-vessels adapted to naval service. In payment for these stock was to be issued.

War, although not formally declared, was carried on by France, upon the ocean, with virulence. Constant captures were made of American vessels, on the ground of having property of the enemy on board. Full preparations were set on foot to resist a French invasion, and, for the management of naval affairs, a naval department was now created.

The debt had now increased to \$88,000,000. In 1803 fifteen millions more were added to it by the purchase from France of the province of Louisiana.

**TREASURY NOTES.**—No special emergencies arose or unusual measures were taken until 1812, when the second war with Great Britain was declared by the Congress of the United States. This closed in 1815, and increased the debt to \$127,300,000; a higher figure than it had ever touched before, or afterward, until 1862. The only new measure adopted at this time was the issue of Treasury notes. The bill to authorize the issue was opposed in Congress on the ground that "it was ingrafting on our system of finances a new and untried measure." The measure, however, was successful, and it has since been one of the occasional aids of the Treasury Department. The embarrassment of the Government at the close of the war furnished a basis for an irresistible argument in favor of the recharter of the United States Bank. No less a person than Mr. John C. Calhoun, of South Carolina, introduced, from a special committee of the House of Representatives, the bill for its incorporation on January 8, 1816. The constitutional question relating to it received little attention on its passage. Thus, by means of revenue from imports, and other domestic sources, temporary loans, Treasury notes, and five, six, and seven per cent loans, the financial affairs were honorably conducted until 1821, when the Secretary of the Treasury reported an expected deficit of over four and a half millions to be provided for by taxation.

At this period the country was suffering from the effects of a financial crisis in 1819. A committee from the House of Representatives, in a report, thus described the general distress:

It is not a matter of very great consolation to know that, at the end of thirty years of its operation, this Government finds its debt increased \$20,000,000, and its revenue inadequate to its expenditure; the national domain impaired, and \$20,000,000 of its proceeds expended; \$35,000,000 drawn from the people by internal taxation, \$341,000,000 by impost, yet the public Treasury dependent on loans; in profound peace, and without national calamity, the country embarrassed with debts, and real estate under rapid depreciation; the markets of agriculture, the pursuits of manufactures diminished and declining; commerce struggling, not to retain the carrying of the produce of other nations, but our own. There is no national interest which is in a healthful, thriving condition; the nation at large is not so; the operations of the Government and individuals alike labor under difficulties which are felt by all. . . . The sea, the forest, the earth yield their abundance; the labor of man is rewarded; pestilence, famine, or war commit no ravages; no calamity has visited the people; peace smiles on us; plenty blesses the land. Whence, then, this burst of universal distress?

**STATE DEPOSITS.**—An improvement soon came; higher taxes followed, under which South Carolina denied its constitutionality, owing to the extreme protective form given to it at that time. This supplied the Treasury, and enabled the Government to dispense with the aid of the United States Bank, the charter of

which was allowed to expire about 1835. The final result was that, in 1834, the Government of the United States was, for the first time in its history, practically out of debt, for the last installment of the debt had been paid. Nay, so abundant was the money in the Treasury that the Government returned over \$28,000,000 back to the people, under the form of a "deposit," made proportionally to the States. All of the States accepted the unasked deposit at the time, and generally appropriated it to educational purposes. The following statement shows the amount of money thus "deposited" with the several States under the act of June 23, 1836. The fund originally proposed to be distributed among the States was \$36,000,000, and \$28,101,644.91 was really distributed, in three quarterly installments, the first in February, 1837, the second in April, and the third in July. The fourth and last installment was not paid. A series of disasters, ending in the panic of 1837, so disordered the finances of the General Government that a new act of Congress was passed, on October 2d, postponing the transfer of the fourth installment until January 1, 1839. By a subsequent act it was postponed indefinitely; and it was further provided that the amount deposited should remain with the States until otherwise directed by Congress. Here the matter has remained:

Maine.....	\$955,898 25
New Hampshire.....	669,086 79
Massachusetts.....	1,838,173 58
Vermont.....	669,086 79
Connecticut.....	764,670 60
Rhode Island.....	382,385 30
New York.....	4,014,320 71
New Jersey.....	764,670 60
Pennsylvania.....	2,867,514 73
Delaware.....	286,751 49
Maryland.....	955,898 25
Virginia.....	2,198,427 99
North Carolina.....	1,488,757 39
South Carolina.....	1,051,422 09
Georgia.....	1,051,422 09
Alabama.....	699,086 79
Louisiana.....	477,919 14
Mississippi.....	382,385 30
Tennessee.....	1,488,757 39
Kentucky.....	1,488,757 39
Ohio.....	2,907,260 34
Missouri.....	382,385 30
Indiana.....	860,234 44
Illinois.....	477,919 14
Michigan.....	286,751 49
Arkansas.....	286,751 49
Total.....	\$28,101,644 91

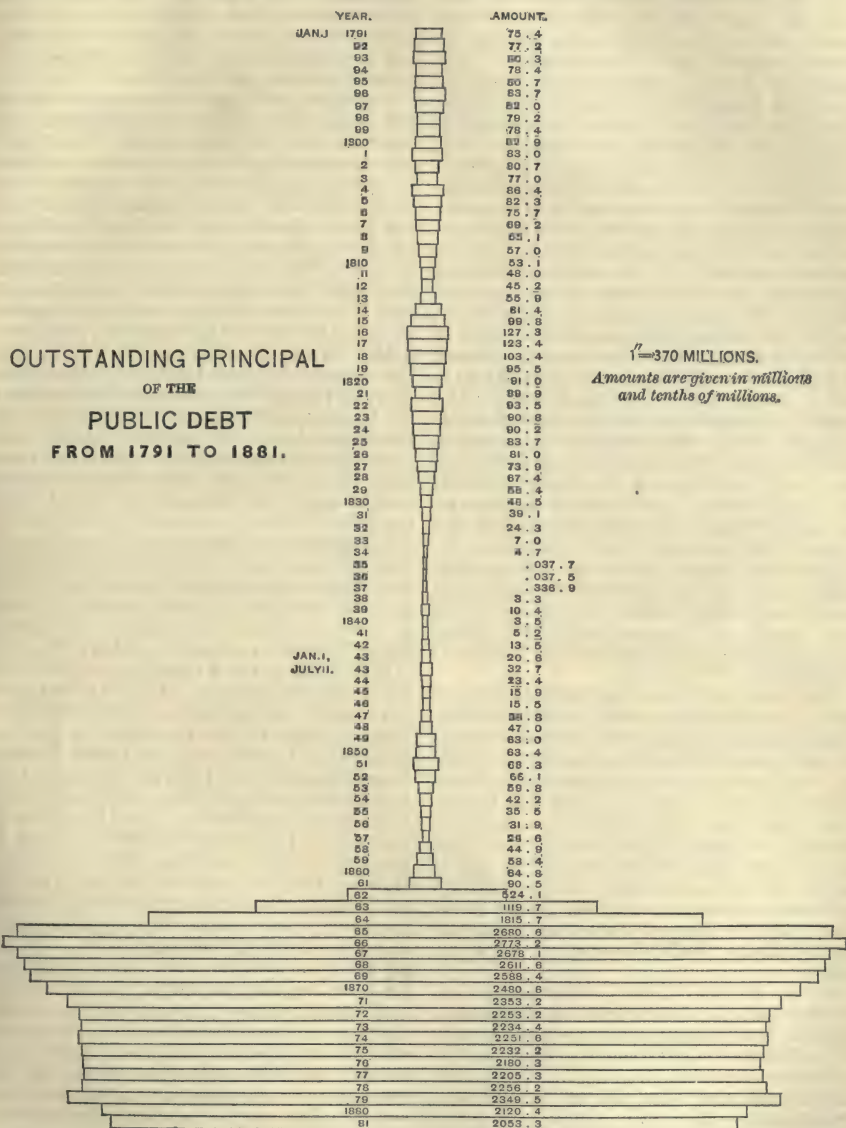
Now followed the memorable contest on the question of sub-Treasuries, located in different places, as depositories of the money of the Government, a service which had been rendered by the branches of the defunct United States Bank. At the same time (1837) commenced a state of extraordinary financial depression, which continued for some years. Issues of Treasury notes and loans were resorted to for relief; so that, in 1846, when war with Mexico was declared, the public debt had reached \$15,500,000. It immediately mounted up to \$63,000,000 on the final closing up of the expenditures.

There were some incidental expenditures which resulted from this conflict. A bill was



passed by Congress in September, 1850, to pay \$10,000,000 to the State of Texas, if the State should consent that her boundary on the north should commence at a point at which the meridian of one hundred degrees west from Green-

with the channel of said river, to the Gulf of Mexico, and should cede to the United States all her claim to the territory exterior to these boundaries, and relinquish all claim on the United States for liability for her debts, and



wich is intersected by the parallel of 36° 30' north latitude, and run thence due west to the meridian of one hundred and three degrees west from Greenwich, then south to the thirty-second degree of north latitude, then on said parallel to the Rio Bravo del Norte, and thence,

for compensation for the surrender of her ships, forts, custom-houses, public buildings, etc. These terms were accepted, and the "Texas indemnity" stock was issued.

LEGAL TENDERS.—In 1860 the debt of the Government was \$64,800,000. The war com-

menced in the following year, and the wants of the Government were so great that it was obliged to resort to almost every conceivable form of loan to obtain money. The first loans were on Treasury notes of various denominations, and at various rates of interest, with seven per cent thirty-year and five per cent twenty-year bonds, which were known as "seven-thirties" and "five-twenties." The demand for money, however, was so great that as early as January 22, 1862, a bill was introduced into the Lower House of Congress for the issue of a hundred million Treasury notes, with the proviso that there should be printed on the back of the notes the following words: "The within note is a legal tender in payment of all debts, public and private, and is exchangeable for bonds of the United States bearing six per cent interest." With some amendments, the bill was passed by Congress, and approved February 25, 1862. It authorized the Secretary of the Treasury to issue, on the credit of the United States, Treasury notes to the amount of \$150,000,000, bearing no interest, and payable to bearer, of such denominations as he might deem expedient, not less than five dollars each. These notes were to be "receivable in payment of all taxes, internal duties, excises, debts, and demands of every kind due to the United States, except duties on imports, and of all claims and demands against the United States, of every kind whatsoever, except for interest upon bonds and notes, which shall be paid in coin, and shall also be lawful money and a legal tender in payment of all debts, public and private, within the United States, except duties on imports and interest as aforesaid."

They were to be exchangeable in sums of \$50, or any multiple thereof, for bonds of the United States, bearing interest at the rate of six per cent, payable semi-annually, the bonds to be redeemable at the pleasure of the United States after five years, and payable twenty years after date. The notes were made receivable the same as coin, at their par value, for any loans that might thereafter be sold or negotiated by the Secretary of the Treasury, and when received for such loans, or for public dues, might be reissued from time to time, as the exigencies of the Government might require.

An act of July 11, 1862, authorized an additional issue of \$150,000,000 in legal-tender notes, of such denominations as the Secretary of the Treasury might deem expedient; but no note was to be for the fractional part of a dollar, and not more than \$35,000,000 of lower denominations than five dollars. An act of March 3, 1863, authorized another issue of \$150,000,000 in legal-tender notes, including the amount authorized by resolution of January 17, 1863, of such denominations not less than one dollar as the Secretary might prescribe.

Under these acts legal-tender notes have been

issued amounting, in the aggregate, to \$1,640,559,947. The difference between the amount authorized and the amount issued is accounted for by reissues from time to time, as authorized by law. Thus originated, under the form and effect of a loan, the "greenback" currency, so called from the color of back of the notes. It continues in circulation to this day, and is exchangeable for gold, in ordinary transactions, at dollar for dollar.

On July 9, 1864, gold was quoted at 266½ and 267, as compared with legal-tender notes. The question of the constitutionality of these notes has an interesting history, which may be found in earlier volumes of this "Cyclopædia." The Secretary of the Treasury (Chase), who issued the notes, relied entirely for their justification on the ever-serviceable doctrine of *necessity*. He said: "It is not unknown to the committee that I have felt—nor do I wish to conceal that I now feel—a great aversion to making anything but coin a legal tender in payment of debts. It has been my anxious wish to avoid the necessity of such legislation. It is, however, at present impossible, in consequence of the large expenditures entailed by the war, and the suspension of the banks, to procure sufficient coin for disbursements; and it has, therefore, become indispensably necessary that we should resort to the issue of United States notes."

Certificates of indebtedness were another form of loan, issued, in satisfaction of audited accounts, in amounts not less than \$1,000, at 6 per cent interest, payable in one year, or sooner at the option of the Government. The amount issued of these certificates was \$561,753,241.

Still another and a novel form of loan was the fractional currency. A bill "to authorize payments in stamps, and to prohibit the circulation of notes of less denomination than one dollar," was introduced in the Lower House of Congress on July 17, 1862, and was passed and approved on the same day. A letter from the Secretary of the Treasury urged the following reasons for the passage of the bill: "The depreciation of the currency, resulting, in great measure, from the unrestricted issues of non-specie-paying banks and unauthorized associations and persons, causes the rapid disappearance from circulation of small coins. To supply the want of these coins, tokens and checks for sums less than one dollar are being issued by hotels, business houses, and dealers generally; and the most serious inconveniences and evils are apprehended unless these issues can be checked and the small coins of the Government kept in circulation, or a substitute provided." The amount issued of this currency was \$368,720,079.

STATE BANKS.—In his report of December 4, 1862, the Secretary advanced the idea that banking associations should be formed for the improvement of the public credit, and to supply a safe and uniform currency to the people. This was approved by Congress, and resulted



in the adoption of a system of State national banks, and a tax of 2 per cent was laid on the issues of State banks above a certain percentage of their capital. The object was to tax them out of existence. The circulation of the national banks was to be secured by bonds of the United States, with a small sum in specie.

**Bonds.**—On March 3, 1863, an act passed authorizing the issue of \$900,000,000 of 10-40 bonds, payable in coin, and in denominations of \$50 and upward, and exempt from taxation by State or municipal authority. The same act authorized the issue of \$400,000,000 in Treasury notes of not less than \$10, bearing 6 per cent interest, and payable within three years, and exempt from taxation; also \$200,000,000 in Treasury notes, bearing 7½ per cent interest. Of the first notes, \$44,520,000 were issued redeemable in one year, and \$166,480,000 redeemable in two years. They were known as "one- and two-year notes of 1863." Of the latter notes, \$248,601,680 were issued.

On March 3, 1864, a further issue of \$500,000,000 of 10-40 bonds was authorized; and on June 30, 1864, an issue of \$400,000,000 of 5-30 bonds was authorized. Both classes of bonds were to be exempt from State and municipal taxation. Subsequent loans of a similar nature were made until the close of the war. One year afterward, in July, 1866, the debt was stated at its largest amount, \$2,773,200,000.

A recapitulation, showing the amount of the principal of the public debt of the United States, annually issued and redeemed from July 4, 1776, to June 30, 1880, presents the following results:

Issues .....	\$10,690,055,968 32
Redemptions.....	8,569,664,280 85
	<b>\$2,120,391,787 47</b>
Unadjusted, over.....	92,815 46
	<b>\$2,120,484,552 93</b>
Unadjusted, short.....	69,182 30
Outstanding June 30, 1880.....	<b>\$2,120,415,370 63</b>

LOCATION.	AMOUNT.			
	Male.	Female.	Corporation.	Total.
New England States.....	\$50,142,500	\$20,829,550	.....	\$70,972,050
Middle States.....	228,225,150	55,783,100	.....	279,008,250
Southern States.....	10,241,250	2,898,550	.....	13,139,800
Western States.....	43,576,600	10,842,150	.....	54,418,750
Banks, insurance companies, trust companies, etc.....	.....	.....	\$227,451,550	227,451,550
Total.....	<b>\$327,185,500</b>	<b>\$90,853,850</b>	<b>\$227,451,550</b>	<b>\$644,990,400</b>

These tables show that while over 36 per cent of the holders reside in the New England States, not more than 11 per cent of the aggregate amount of bonds are credited to New England. On the other hand, over 42 per cent of the holders have their residence in the Middle States, and upward of 43 per cent of the aggregate amount of bonds is held in that section. Over 3½ per cent of the holders reside in the Southern States, and about 2 per cent of the bonds are owned there. In the Western States are 15 per cent of the holders, and nearly 8½ per cent of the bonds. The

**THE HOLDERS OF THE BONDS, AND AMOUNTS.**—The bonded debt of the United States consists of two classes of bonds—the registered bonds and the coupon bonds. Of the registered bonds there are four species—the 4 per cent, 4½ per cent, 5 per cent, and 6 per cent and they are held as follow:

LOANS.	No. of holders.	Amounts.
4 per cent.....	55,278	\$834,742,800
4½ per cent.....	10,745	125,681,800
5 per cent.....	7,091	184,616,900
6 per cent.....	7,688	180,926,700
Total.....	80,802	\$825,917,100

Omitting the 6 per cent bonds from the calculation, the total number of holders of the other species is 73,114, of whom 42,262 are males and 29,325 are females, and 1,527 are corporations; and of the amount held, the males own \$327,185,500, the females \$90,853,850, and the corporations \$227,451,550. Of these holders, also, 51 per cent, or 37,256, reside in 117 cities of the United States; and they hold 85 per cent of the amount, or \$549,200,600.

The number of holders of registered bonds of 4, 4½, and 5 per cent, who live in different sections of the Union, is shown by the following table:

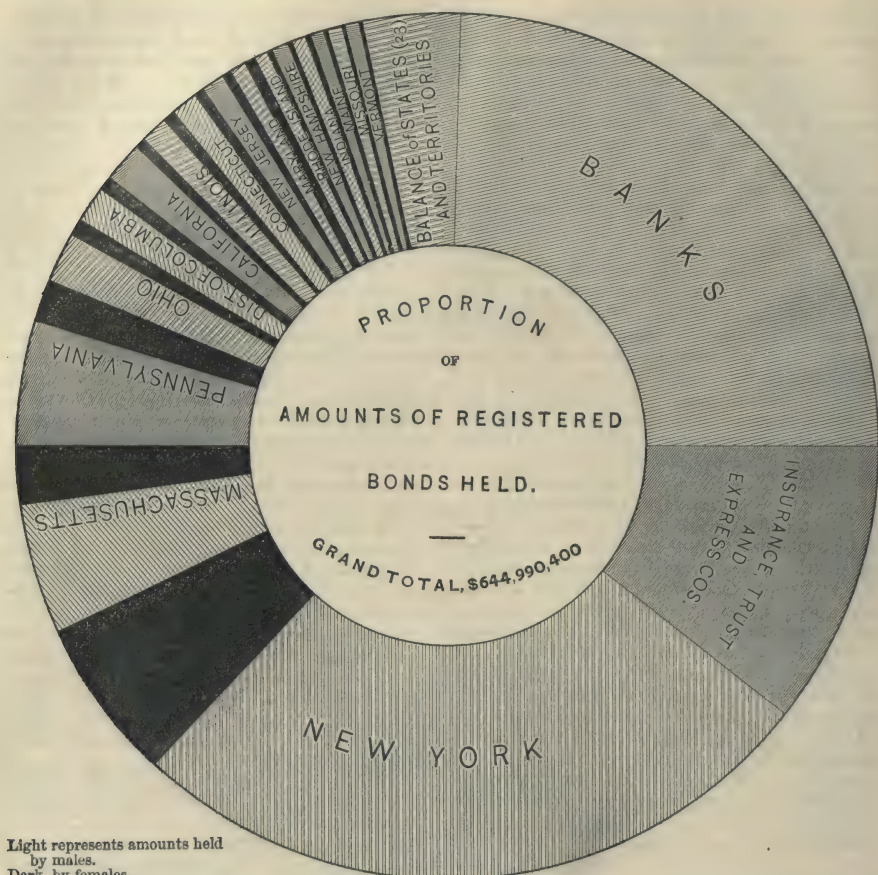
LOCATION.	Male.	Female.	Corporations.	Total.
New England.....	14,638	11,986	.....	26,619
Middle States.....	18,728	12,580	.....	31,308
Southern States.....	1,721	914	.....	2,635
Western States.....	7,185	8,845	.....	11,030
Banks, insurance companies, trust companies, etc.....	.....	.....	1,527	1,527
	42,262	29,325	1,527	73,114

The amounts of the 4, 4½ and 5 per cent bonds held in the different sections of the Union by the above-mentioned holders are shown in the following table:

LOCATION.	AMOUNT.			
	Male.	Female.	Corporation.	Total.
New England States.....	\$50,142,500	\$20,829,550	.....	\$70,972,050
Middle States.....	228,225,150	55,783,100	.....	279,008,250
Southern States.....	10,241,250	2,898,550	.....	13,139,800
Western States.....	43,576,600	10,842,150	.....	54,418,750
Banks, insurance companies, trust companies, etc.....	.....	.....	\$227,451,550	227,451,550
Total.....	<b>\$327,185,500</b>	<b>\$90,853,850</b>	<b>\$227,451,550</b>	<b>\$644,990,400</b>

banks, insurance companies, and other corporations, representing in number only 2 per cent, own about 35 per cent of the bonds.

The District of Columbia contains more bondholders, in proportion to its population, than any of the States of the Union. The Middle States take high rank in the proportion of bondholders to their population, while in the Western and Southern States a small percentage of the population is represented in the total number. The number of the holders of these bonds residing in the different States of the Union is as follows:



Light represents amounts held  
by males.  
Dark, by females.

STATES, ETC.	Number.	Per cent of bondholders.	Per cent of population.	STATES, ETC.	Number.	Per cent of bondholders.	Per cent of population.
Massachusetts.....	16,855	23.04	8.56	Tennessee.....	809	0.51	8.07
New York.....	14,808	20.24	10.14	Wisconsin.....	342	0.47	2.62
Pennsylvania.....	10,408	14.28	8.54	Kansas.....	326	0.46	1.99
Ohio.....	4,180	5.64	6.37	Iowa.....	283	0.39	3.28
Illinois.....	8,101	4.23	6.14	Louisiana.....	262	0.35	1.87
New Hampshire.....	2,939	4.02	0.69	West Virginia.....	194	0.26	1.24
New Jersey.....	2,715	3.70	2.25	Mississippi.....	187	0.20	2.25
Connecticut.....	2,367	3.22	1.24	North Carolina.....	142	0.19	2.79
District of Columbia.....	2,357	3.21	0.36	Texas.....	139	0.19	8.17
Vermont.....	1,909	2.61	0.67	South Carolina.....	137	0.19	1.95
Maine.....	1,711	2.34	1.29	Alabama.....	126	0.16	2.52
Missouri.....	933	1.27	4.32	Territories.....	111	0.14	1.27
Maryland.....	920	1.26	1.86	Delaware.....	100	0.13	0.29
Banks.....	906	1.25	...	Minnesota.....	94	0.12	1.55
Rhode Island.....	893	1.24	0.55	Arkansas.....	78	0.09	1.60
Indiana.....	693	1.00	3.96	Florida.....	64	0.09	0.52
Insurance companies, etc.,	621	0.85	...	Colorado.....	61	0.09	0.89
Virginia.....	478	0.63	3.02	Georgia.....	58	0.08	3.06
Michigan.....	453	0.62	8.26	Nebraska.....	55	0.07	0.90
Kentucky.....	451	0.61	8.29	Nevada.....	18	0.03	0.14
California.....	411	0.56	1.72	Oregon.....	14	0.02	0.34
Total.....					78,114	100.00	100.00

From this table it appears that Massachusetts, with only  $3\frac{1}{2}$  per cent of the total population of the country, has 23 per cent of the total number of bondholders; while New

York, with over 10 per cent of the total population, has 20 per cent of the bondholders. Ohio has over 6 per cent of the total population and over  $5\frac{1}{2}$  per cent of the bondholders.





The 6 per cent registered bonds, which are not included in the preceding tables, amount to \$180,926,700, and were held by 7,688 corporations and private individuals. Of these holders 4,239 received their interest in New York city; 1,611 in Boston; 1,306 in Philadelphia; 243 in Baltimore; 42 in Chicago; 54 in Cincinnati; 169 in Washington; 5 in San Francisco; 10 in St. Louis; and 9 in New Orleans.

Thus it appears that the whole number of

holders of registered bonds is 80,802, and the aggregate amount held is \$825,917,100.

**COUPON BONDS.**—These bonds are of different species, like the registered bonds, and on June 30, 1880, they amounted to \$537,532,250. The coupons of the bonds are often used as cash, and are presented for the interest on the bond by the holder. It is thus impossible to trace the ownership of the bond with the same accuracy as that of the registered bond.





# INDEBTEDNESS OF THE UNITED STATES, OF THE STATES, ETC. 405

The following table shows the amount of each class of bonds as represented by the coupons paid at the U. S. Treasury, and the nine sub-Treasuries, for the date nearest the census year:

SUB-TREASURIES.	AMOUNT.				
	4 per cent.	4½ per cent.	5 per cent.	6 per cent.	Total.
Total amount outstanding June 30, 1880.....	\$210,272,850	\$78,892,650	\$190,278,400	\$58,088,850	\$537,532,250
New York.....foreign holders..	\$46,428,885	\$37,191,382	\$122,891,608	\$14,596,550	\$221,108,425
New York.....domestic holders..	82,804,815	27,488,032	41,001,082	25,381,550	176,825,479
Total.....	\$129,233,700	\$64,679,464	\$163,892,640	\$40,128,100	\$397,438,904
Washington.....United States Treasury..	11,709,475	858,644	671,520	1,486,038	14,170,672
Boston.....domestic.....	28,558,200	10,091,822	4,565,440	9,110,700	47,326,162
Philadelphia.....	9,461,350	1,554,632	5,243,998	8,300,699	19,560,679
Baltimore.....	2,665,775	744,016	5,043,009	2,060,128	10,512,928
Cincinnati.....	14,939,450	175,287	1,848,495	791,800	17,755,032
Chicago.....	8,491,000	819,848	4,536,129	902,112	14,748,589
St. Louis.....	5,586,600	220,808	4,203,609	289,978	10,250,990
New Orleans.....	1,430,900	153,512	53,400	27,000	1,664,812
San Francisco.....	8,696,400	100,622	220,160	91,800	4,108,982
Total domestic.....	\$163,843,965	\$41,701,268	\$67,386,792	\$48,491,800	\$316,423,825
Total foreign.....	46,428,885	37,191,382	122,891,608	14,596,550	221,108,425

DEBTS OF THE STATES.—The assumption by the United States Government, in 1790, of the debts of the States which were contracted during the War for Independence, is related on a preceding page. Subsequent to that date until 1820, only a small amount was contract-

ed. It was after the latter date that public improvements were undertaken. In 1812 a small war debt was contracted by some States.

The following table shows the amount of stocks issued by the several States named, from 1820 to 1838:

STATES.	1820-'25.	1825-'30.	1830-'35.	1835-'38.	Total.
Alabama.....	\$100,000	.....	\$2,200,000	\$8,500,000	\$10,800,000
Arkansas.....	.....	.....	.....	8,000,000	8,000,000
Illinois.....	.....	.....	600,000	11,000,000	11,600,000
Indiana.....	.....	.....	1,890,000	10,000,000	11,890,000
Kentucky.....	.....	.....	.....	7,369,000	7,369,000
Louisiana.....	1,800,000	.....	7,385,000	14,000,000	23,185,000
Maine.....	.....	.....	554,976	.....	554,976
Maryland.....	57,947	\$576,689	4,210,311	6,648,038	11,492,980
Massachusetts.....	.....	.....	.....	4,290,000	4,290,000
Michigan.....	.....	.....	.....	5,840,000	5,840,000
Mississippi.....	.....	.....	2,000,000	5,000,000	7,000,000
Missouri.....	.....	.....	.....	2,500,000	2,500,000
New York.....	16,872,751	1,624,000	2,204,970	12,229,288	22,931,048
Ohio.....	.....	4,400,000	1,701,000	.....	6,101,000
Pennsylvania.....	1,680,000	6,800,000	16,130,000	3,166,787	27,776,790
South Carolina.....	\$1,250,000	310,000	.....	4,000,000	5,560,000
Tennessee.....	.....	.....	500,000	6,648,000	7,148,000
Virginia.....	\$1,080,000	469,000	686,500	4,132,700	6,318,200
Total.....	\$12,790,728	\$13,679,689	\$40,012,769	\$107,823,808	\$174,806,994

\* It is claimed by the people of Mississippi that the debt of \$5,000,000 was contracted in violation of the Constitution, and that the State was not liable therefor.

† \$4,500,000 redeemed.

‡ South Carolina had a Revolutionary debt of \$193,770.

§ Virginia had a war debt contracted before 1820 of \$343,189.

The following table shows the amount and the purpose of each State debt in 1838:

STATES.	For banking.	For canal.	For railroads.	For turnpikes.	Miscellaneous.	Total.
Alabama.....	\$7,800,000	.....	\$3,000,000	.....	.....	\$10,800,000
Arkansas.....	3,000,000	.....	.....	.....	.....	3,000,000
Illinois.....	3,000,000	\$900,000	7,400,000	.....	\$300,000	11,600,000
Indiana.....	1,890,000	6,750,000	2,600,000	\$1,150,000	.....	11,890,000
Kentucky.....	2,000,000	2,619,000	850,000	2,400,000	.....	7,369,000
Louisiana.....	22,950,000	50,000	500,000	.....	235,000	23,735,000
Maine.....	.....	.....	.....	.....	554,976	554,976
Maryland.....	.....	5,700,000	5,500,000	.....	292,980	11,492,980
Massachusetts.....	.....	.....	4,290,000	.....	.....	4,290,000
Michigan.....	.....	2,500,000	2,620,000	.....	220,000	5,340,000
Mississippi.....	7,000,000	.....	.....	.....	.....	7,000,000
Missouri.....	2,500,000	.....	.....	.....	.....	2,500,000
New York.....	.....	13,816,674	3,787,700	.....	1,158,032	18,262,406
Ohio.....	.....	6,101,000	.....	.....	.....	6,101,000
Pennsylvania.....	.....	16,579,527	4,964,454	2,595,902	8,166,787	27,306,700
South Carolina.....	.....	1,550,000	2,000,000	.....	2,203,770	5,753,770
Tennessee.....	3,000,000	300,000	3,730,000	.....	118,166	7,148,166
Virginia.....	.....	3,885,350	2,128,900	854,800	843,189	6,662,189
Total.....	\$52,640,000	\$60,201,551	\$42,371,034	\$6,618,868	\$3,474,654	\$170,806,187

Early in 1840 the question of the United States assuming the States' debts, contracted during the period described, was agitated in Congress. The first figures that bear evidence of authenticity, as showing the amount and the purposes for which the State debts had been contracted, appear in the speech of Senator Benton, made before the Senate in January, 1840, the figures being supplied by Mr. Flagg, the Comptroller of the State of New York. From these tables it seems that \$170,000,000 of debt had actually been contracted or authorized by the eighteen States previous to 1840, without counting the \$28,101,644.91 received from the surplus revenue funds of the Federal Government. Taking into the calculation the amount probably incurred in the period between the report of Mr. Flagg and the speech of Senator Benton, together with the Florida debt of \$5,000,000, and making allowance for possible omissions from Mr. Flagg's table, the whole debt might then have been estimated at more than \$200,000,000. Eight of the States of the Union at that time, viz., New Hampshire, Vermont, Rhode Island, Connecticut, New Jersey, Delaware, North Carolina, and

Georgia, had no debt. Maine and Missouri were only nominally in debt, the former having created but half a million of debt.

The tenth census of the United States contains not only a statement of the amount of the debt of each State, but a history of the details of each, showing the purpose for which each sum was incurred, and the progress of its payment. Previous to the war there was little change in the amount of these debts, except in those States which engaged extensively in internal improvements. But in the period from 1860 to 1870 there was a large increase of war debts. For the purpose of showing the aggregate of 1880, it is presented separately for each division of the Union.

**NEW ENGLAND STATES.**—There was but little fluctuation in the debts of the New England States from 1839 to 1860, when there were slight changes in those of Maine, New Hampshire, and Massachusetts. Vermont had contracted a debt for a new State-House. Rhode Island and Connecticut continued to be free from debt. The following table shows the debts of the six New England States at six different periods:

NEW ENGLAND STATES.	1839.	1842.	1858.	1860.	1870.	1880.
		Funded debt.	Funded debt.	Funded debt.	Funded debt.	Funded debt.
Maine.....	\$554,976	\$1,734,861	\$471,500	\$699,500	\$8,067,900	\$5,848,900
New Hampshire *.....			74,899	50,087	2,752,200	3,501,100
Vermont.....				175,000	1,002,500	4,000
Massachusetts †.....	4,290,000	5,424,187	6,445,000	6,817,127	27,128,164	88,020,464
Rhode Island.....					2,918,500	2,584,500
Connecticut.....					7,275,900	4,967,600
Total.....	\$4,844,976	\$7,158,998	\$6,991,399	\$7,741,714	\$49,140,164	\$49,876,564

\* In 1870 New Hampshire had an extra debt of \$65,000.

† In 1860 Vermont had an extra debt of \$24,636; and in 1880, of \$135,000.

‡ In 1860 Massachusetts had an extra debt of \$815,000; and in 1880, of \$9,360.

**MIDDLE STATES.**—Under the title "Middle States," New York, New Jersey, Pennsylvania, Delaware, and Maryland are included. Of these five States, New Jersey and Delaware have no debt excepting that incurred for war purposes. The former had in its Constitution of 1844 a provision which prohibited the State from aiding or in any way loaning its credit to public improvements. New York, Pennsylvania, and Maryland were among the first States to aid in

the construction of canals and railroads, and in loaning their credit to State banks. As early as 1839 these three States were indebted to the extent of \$54,984,389. In 1842 Pennsylvania and Maryland were obliged to suspend interest, and New York was on the verge of bankruptcy.

The following table shows the amount of the debt of each of the Middle States at six different periods:

MIDDLE STATES.	1839.	1841.	1858.	1860.	1870.	1880.
		Funded debt.	Funded debt.	Funded debt.	Funded debt.	Funded debt.
New York *.....	\$18,262,406	\$17,561,567	\$24,328,898	\$27,064,584	\$32,409,144	\$8,988,360
New Jersey.....					2,996,200	1,996,300
Pennsylvania †.....	25,229,008	33,301,013	40,272,285	87,849,125	81,111,662	21,561,990
Delaware.....						880,750
Maryland ‡.....	11,492,980	10,000,000	10,000,000	14,876,958	18,317,475	11,277,111
Total.....	\$54,984,389	\$60,862,580	\$74,596,073	\$79,790,667	\$79,884,451	\$44,704,511

\* In 1841 New York had an extra debt of \$4,235,700; and in 1860, of \$6,505,654.

† In 1860 Pennsylvania had an extra debt of \$180,721.

‡ In 1841 Maryland had an extra debt of \$5,214,761; and in 1853, of \$5,356,224.—The debt of the District of Columbia, located in the Middle States, is \$21,688,328.

**SOUTHERN STATES.**—The following table shows the amount of the debt of each of the Southern States at six different periods:



SOUTHERN STATES.	1889.	1841.	1853.	1860.	1870.	1880.
		Funded debt.	Funded debt.	Funded debt.	Funded debt.	Funded debt.
Virginia.....	\$6,662,089	\$4,087,200	\$12,059,882	\$83,243,141	\$89,298,225	\$29,345,226
West Virginia.....						
North Carolina.....			2,224,000	9,129,505	29,900,000	5,006,616
South Carolina.....	5,753,770	8,691,284	1,925,893	4,046,540	7,665,900	6,689,171
Georgia.....		1,309,750	2,502,472	2,670,750	6,544,500	9,951,500
Florida*.....		100,000		383,000	1,012,372	1,280,500
Alabama†.....	10,800,000	15,400,000	4,497,666	8,445,000	5,882,500	9,008,000
Mississippi‡.....	2,000,000	2,000,000	2,271,000	753,413	100,000	379,455
Louisiana§.....	23,735,000	23,955,000	9,539,207	4,031,000	22,560,233	22,430,800
Texas  .....	Not a State.	Not a State.	5,341,523			5,566,923
Arkansas¶.....	3,000,000	2,676,000	2,433,339	3,092,622	3,050,000	2,313,500
Tennessee**.....	7,143,166	3,898,000	3,653,856	20,398,606	31,592,144	20,991,700
Kentucky††.....	7,369,000	3,955,500	5,571,297	5,479,244	3,076,430	1,553,003
Total.....	\$66,468,025	\$59,682,684	\$52,455,140	\$87,177,821	\$150,482,663	\$115,271,484

\* In 1841 Florida had an extra debt of \$3,900,000; in 1870, \$276,325; and in 1880, \$4,480.

† In 1870 Alabama had an extra debt of \$3,095,218; and in 1880, \$63,765.

‡ In 1870 Mississippi had an extra debt of \$1,696,230.

§ In 1860 Louisiana had an extra debt of \$530,108; in 1870, \$2,461,501; and in 1880, \$1,006,840.

|| In 1870 Texas had an extra debt of \$503,641.

¶ In 1853 Arkansas had an extra debt of \$1,614,217; in 1870, \$409,537; and in 1880, \$2,232,905.

\*\* In 1870 Tennessee had an extra debt of \$6,647,653; and in 1880, \$6,443,731.

†† In 1870 Kentucky had an extra debt of \$316,000.

WESTERN STATES.—The following shows the debt of Western States at different periods:

WESTERN STATES.	1889.	1841.	1853.	1860.	1870.	1880.
		Funded debt.	Funded debt.	Funded debt.	Funded debt.	Funded debt.
Ohio.....	\$6,101,000	\$10,924,123	\$15,542,549	\$16,927,584	\$9,732,073	\$6,474,805
Indiana.....	11,800,000	12,751,000	7,712,830	10,179,267	4,167,507	4,993,173
Illinois.....	11,600,000	13,527,292	17,000,000	10,277,161	4,890,937	
Michigan*.....	5,340,000	5,611,000	2,359,551	2,214,235	2,385,023	905,150
Wisconsin.....			100,000		63,200	11,000
Iowa†.....			55,000	322,295	584,493	370,425
Minnesota‡.....				250,000	500,000	2,565,000
Missouri§.....	2,500,000	342,261	302,000	602,000	433,000	16,239,000
Kansas  .....					1,341,975	1,181,975
Nebraska¶.....				4,000	36,300	499,267
Colorado**.....						
Nevada††.....					500,000	56,400
Oregon‡.....					106,533	355,503
California§.....			2,977,483	3,824,000	3,311,500	3,403,000
Total.....	\$37,431,000	\$43,635,676	\$46,569,463	\$44,600,792	\$27,862,606	\$37,090,213

\* In 1860 Michigan had an unfunded debt of \$102,098.

† In 1860 Iowa had an unfunded debt of \$29,637.

‡ In 1860 Minnesota had an unfunded debt of \$63,636.

§ In 1860 Missouri had an unfunded debt of \$25,350,000; and in 1870, of \$17,423,000.

|| In 1870 Kansas had an unfunded debt of \$251,331.

¶ In 1860 Nebraska had an unfunded debt of \$48,960; and in 1870, \$211,000.

\*\* In 1880 Colorado had an unfunded debt of \$212,814.

†† In 1870 Nevada had an unfunded debt of \$142,894; and in 1880, \$18,996.

‡ In 1880 Oregon had an unfunded debt of \$154,563.

§ In 1853 California had an unfunded debt of \$269,312; and in 1870, \$117,527.

STATE AND LOCAL INDEBTEDNESS.—The following table shows the aggregate of State and local indebtedness in the United States:

STATES AND TERRITORIES.	Bonded.	Floating.	Gross debt.	Sinking fund.	Net debt.
Total United States.....	\$1,117,321,671	\$84,159,444	\$1,201,981,115	\$145,396,969	\$1,056,584,146
NEW ENGLAND STATES.					
Maine.....	\$22,299,503	\$2,329,069	\$24,628,565	\$2,221,715	\$22,406,850
New Hampshire.....	3,665,059	2,131,375	10,796,434	72,264	10,724,170
Vermont.....	3,313,863	1,189,773	4,403,641	56,473	4,352,163
Massachusetts.....	109,933,943	11,695,933	121,629,856	30,245,973	91,238,913
Rhode Island.....	14,075,250	1,066,117	15,141,367	2,033,577	13,102,790
Connecticut.....	20,462,354	3,033,613	23,545,972	1,544,311	22,001,661
Total.....	\$173,654,977	\$21,495,883	\$200,150,865	\$36,279,313	\$163,871,552
MIDDLE STATES.					
New York.....	\$250,433,231	\$3,155,367	\$253,588,598	\$39,915,254	\$213,723,314
New Jersey.....	51,538,613	3,699,333	55,238,151	5,711,049	49,547,102
Pennsylvania.....	123,830,573	5,410,337	134,290,915	20,256,056	114,034,759
Delaware.....	2,297,300	49,235	2,346,535		2,346,535
Maryland.....	33,719,269	214,679	33,933,948	23,033,042	10,896,006
District of Columbia.....	21,699,564	1,187,205	22,886,769	211,310	22,675,459
Total.....	\$438,638,655	\$18,716,311	\$507,354,966	\$69,131,741	\$438,223,225

# 408 INDEBTEDNESS OF THE UNITED STATES, OF THE STATES, ETC.

STATES AND TERRITORIES.	Bonded.	Floating.	Gross debt.	Sinking fund.	Net debt.
<b>SOUTHERN STATES.</b>					
Virginia.....	\$42,177,694	\$383,814	\$42,561,508	\$461,706	\$42,099,802
West Virginia.....	1,478,388	104,162	1,577,500	64,076	1,513,424
North Carolina.....	7,201,883	1,029,978	8,231,861	87,255	8,194,606
South Carolina.....	18,419,958	655,161	14,075,119	729,181	18,845,998
Georgia.....	19,670,625	161,528	19,882,153	150,250	19,681,903
Florida.....	2,566,880	209,729	2,776,609	150,100	2,626,509
Alabama.....	14,517,445	211,100	14,728,545	.....	14,728,545
Mississippi.....	1,719,241	293,949	2,018,190	.....	2,018,190
Louisiana.....	38,683,462	4,224,478	42,860,935	8,953	42,863,952
Texas.....	11,001,223	653,165	11,654,388	49,480	11,604,918
Arkansas.....	5,045,616	8,908,513	8,949,129	1,010,345	7,938,784
Kentucky.....	19,112,158	1,363,182	20,475,335	5,497,454	14,977,881
Tennessee.....	28,388,282	9,051,275	37,889,557	1,657	37,387,900
<b>Total.....</b>	<b>\$204,887,805</b>	<b>\$22,247,029</b>	<b>\$227,134,834</b>	<b>\$8,155,487</b>	<b>\$218,979,347</b>
<b>WESTERN STATES.</b>					
Ohio.....	\$53,652,007	\$823,086	\$54,475,093	\$5,721,189	\$48,753,954
Indiana.....	16,794,078	1,750,413	18,544,491	190,754	18,353,737
Illinois.....	41,660,369	4,225,303	45,885,672	707,750	45,180,922
Michigan.....	9,802,293	454,735	10,257,028	1,453,584	8,803,444
Wisconsin.....	9,118,403	2,371,820	11,490,223	114,231	11,375,992
Iowa.....	7,562,302	536,242	8,098,544	495,777	7,602,767
Minnesota.....	8,295,196	278,528	8,573,719	97,655	8,476,064
Missouri.....	55,446,001	2,666,870	58,112,880	681,558	57,431,322
Kansas.....	15,407,686	717,997	16,125,683	119,830	16,005,853
Nebraska.....	6,114,886	1,573,553	7,688,389	262,632	7,425,757
Colorado.....	2,159,100	1,435,196	3,594,296	.....	3,594,296
Nevada.....	863,025	236,594	1,099,619	75,396	1,024,223
Oregon.....	459,908	889,494	848,502	.....	848,502
California.....	16,849,379	2,383,910	18,688,789	1,928,101	16,755,688
<b>Total.....</b>	<b>\$248,994,188</b>	<b>\$20,297,045</b>	<b>\$264,281,228</b>	<b>\$11,788,707</b>	<b>\$252,492,521</b>
<b>THE TERRITORIES.</b>					
Arizona.....	\$188,200	\$189,301	\$377,501	.....	\$377,501
Dakota.....	827,823	184,842	1,012,665	13,905	998,560
Idaho.....	71,749	163,670	235,319	.....	235,319
Montana.....	400,100	387,741	787,841	27,916	759,925
New Mexico.....	46,179	38,698	84,872	.....	84,872
Utah.....	.....	116,251	116,251	.....	116,251
Washington.....	75,000	164,311	239,311	.....	239,311
Wyoming.....	47,000	158,462	205,462	.....	205,462
<b>Total.....</b>	<b>\$1,656,051</b>	<b>\$1,403,171</b>	<b>\$3,059,222</b>	<b>\$41,721</b>	<b>\$3,017,501</b>

DETAILS OF LOCAL INDEBTEDNESS.—In the cities and towns of the United States containing a population of 7,500 and upward, the total population in 1880 was 11,600,768. The number of the cities and towns was 311; the total bonded debt, \$682,096,460; the total floating debt, \$28,439,464; the gross debt, \$710,535,924; the sinking fund, \$117,191,506; and the net debt, \$593,344,418; the net debt per capita, \$51.15.

The debt of the municipalities having less population than 7,500 is as follows: bonded, \$41,995,999; floating, \$14,380,858; total, \$56,376,857; sinking fund, \$559,731; net debt, \$55,817,126.

The amount of the debts of the counties in the United States is as follows: bonded, \$106,767,946; floating, \$18,703,609; total, \$125,471,555; sinking fund, \$1,593,869; net debt, \$123,877,686.

The amounts of debts of townships in the Middle and Western States, where this civil division exists, are as follow: bonded, \$30,120,048; floating, \$1,789,597; total, \$31,909,645; sinking fund, \$308,401; net debt, \$31,601,244.

The amount of school-district debt in the States and Territories is as follows: bonded, \$9,869,242; floating, \$7,638,169; no sinking fund.

The purposes for which the outstanding

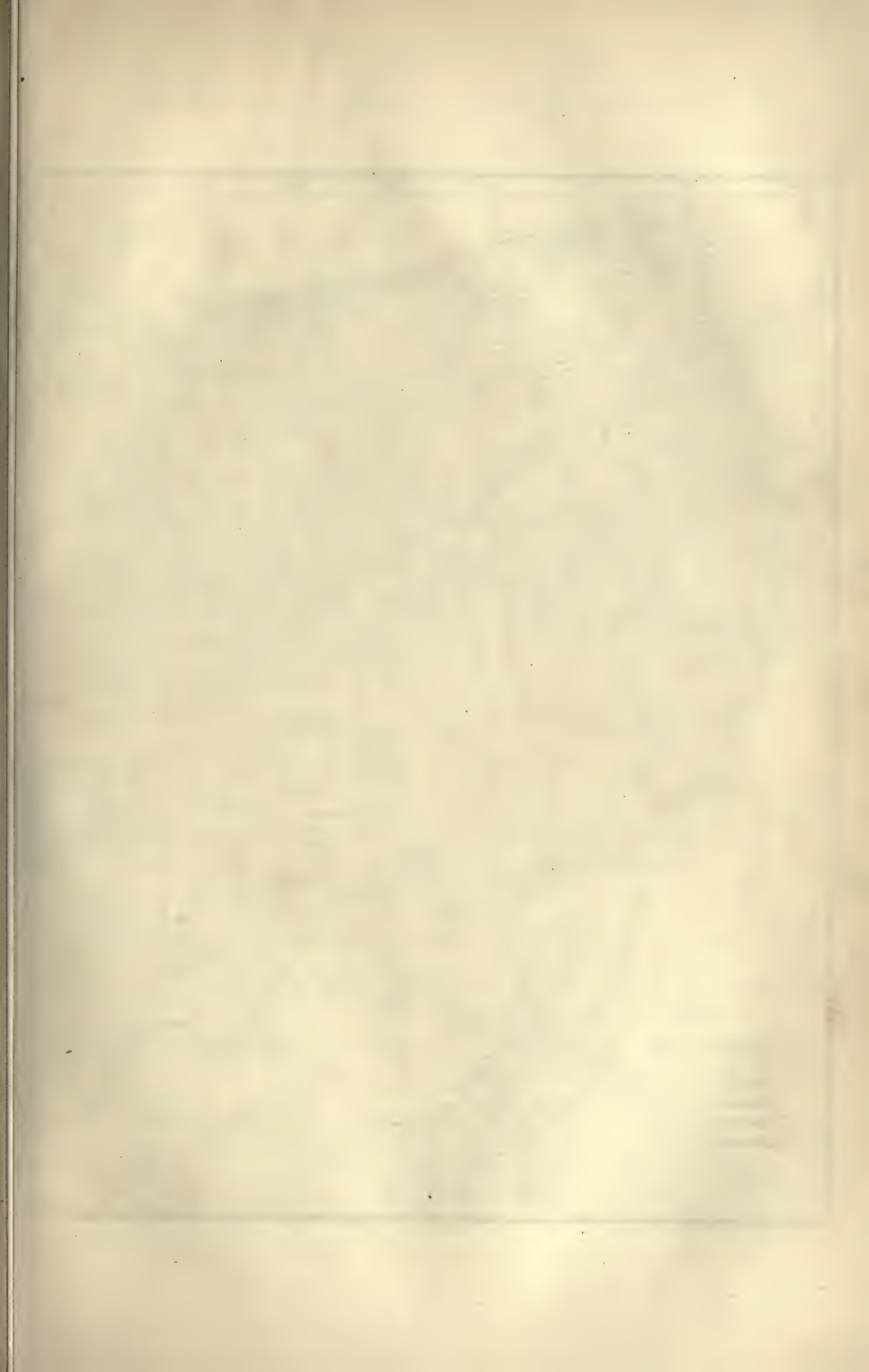
bonded State and local debts of the United States were contracted are briefly stated in the report as follow:

Bridges.....	\$24,853,888
Cemeteries.....	283,516
Fire Department.....	2,514,032
Funding floating debt.....	153,949,095
Improvement of harbors, rivers, wharves, canals, and water-power.....	36,224,548
Parks and public places.....	40,612,536
Public buildings.....	48,499,952
Railroad and other aid.....	185,638,948
Refunding old debt.....	188,749,730
Schools and libraries.....	26,509,437
Sewers.....	21,370,536
Streets.....	86,674,560
Miscellaneous.....	180,374,753
War expenses.....	75,154,400
Water-works.....	146,423,865
<b>Total.....</b>	<b>\$1,117,821,671</b>

Of this total indebtedness, there is due from the Eastern States, \$178,654,977; from the Middle States, the sum of \$488,638,655; from the Southern States, \$204,887,805; from the Western States, \$243,984,183; and from the Territories, \$1,656,951.

ASSESSED VALUATION.—The following table presents the population of the United States and of the five geographical sections, the assessed valuation and the per capita valuation, the bonded debt, and the per capita bonded debt, and the amount of the annual charge, with the per capita annual charge:









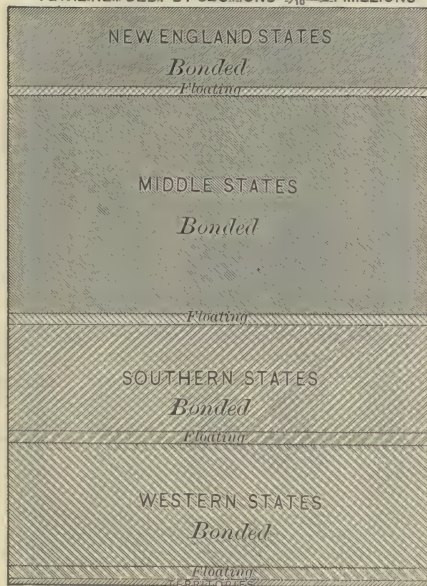
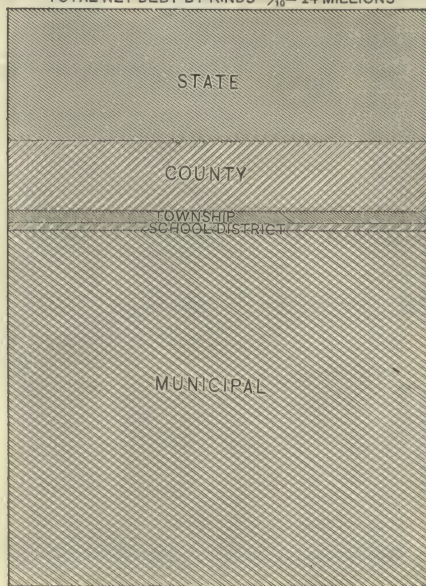






SECTIONS.	Population.	ASSESSED VALUATION.		BONDED DEBT.*		ANNUAL CHARGE.	
		Amount.	Per capita.	Amount.	Per capita.	Amount.	Per capita.
New England States.....	4,010,529	\$2,651,555,822	\$661 15	\$173,654,977	\$44 54	\$9,918,143	\$2 47
Middle States.....	11,756,053	5,564,578,488	478 84	488,698,655	41 57	29,450,866	2 51
Southern States.....	15,257,398	2,370,928,269	155 40	204,887,805	13 43	12,452,792	82
Western States.....	18,524,989	6,187,484,625	334 00	243,984,188	13 17	17,018,852	92
Territories.....	606,819	128,218,629	211 29	1,656,051	2 78	154,043	25
The United States.....	50,155,783	\$16,902,755,893	\$337 01	\$1,117,821,671	\$22 28	\$65,989,196	\$1 38

\* Floating debt more than covered by sinking funds.

TOTAL NET DEBT BY SECTIONS— $\frac{1}{10}$ —24 MILLIONSTOTAL NET DEBT BY KINDS— $\frac{1}{10}$ —24 MILLIONS

**VALUATION AND TAXATION IN THE STATES.**—The following tables show the assessed valuation of real estate and personal property in the several States and Territories of the Union, and also the State, county, and city

taxation on this property, by States and geographical groups, 1880; they show the total taxation to amount to the sum of \$302,200,674, and the total valuation, \$16,902,993,543:

STATES AND TERRITORIES.	ASSESSED VALUATION.			TAXATION.			
	Real estate.	Personal property.	Total.	State.	County.	Civil divisions less than counties.	Total.
<b>NEW ENGLAND STATES.</b>							
Maine.....	\$173,856,242	\$62,122,474	\$235,978,716	\$1,068,510	\$824,401	\$3,794,224	\$5,182,135
New Hampshire.....	122,733,124	42,022,057	164,755,181	395,372	488,978	1,818,290	2,697,640
Vermont.....	71,436,623	15,370,152	86,806,775	408,286	15,344	1,326,481	1,745,111
Massachusetts.....	1,111,160,072	473,596,730	1,584,756,802	1,501,182	1,125,901	21,699,794	24,826,877
Rhode Island.....	188,224,459	64,312,214	252,536,673	394,298	.....	2,298,477	2,692,715
Connecticut.....	228,791,267	98,886,118	327,177,385	489,125	145,707	4,730,907	5,365,739
<b>Total.....</b>	<b>\$1,896,201,787</b>	<b>\$755,809,745</b>	<b>\$2,652,011,532</b>	<b>\$4,246,718</b>	<b>\$2,095,381</b>	<b>\$35,668,178</b>	<b>\$42,010,217</b>
<b>MIDDLE STATES.</b>							
New York.....	\$2,329,282,359	\$922,657,647	\$2,651,940,006	\$7,880,809	\$6,160,119	\$42,352,059	\$56,392,975
New Jersey.....	442,682,638	129,585,723	572,268,361	1,283,711	1,983,318	5,736,096	8,958,065
Pennsylvania.....	1,540,007,957	148,451,069	1,688,459,016	485,578	4,612,165	28,506,591	28,604,334
Delaware.....	50,802,739	9,648,904	59,951,643	.....	248,275	35,982	604,257
Maryland.....	868,442,918	128,864,762	497,307,675	860,977	1,893,084	2,688,401	5,487,462
District of Columbia.....	87,980,356	11,421,431	99,401,787	1,469,254	.....	.....	1,469,254
<b>Total.....</b>	<b>\$4,818,648,962</b>	<b>\$745,929,526</b>	<b>\$5,564,578,488</b>	<b>\$11,980,323</b>	<b>\$14,851,961</b>	<b>\$74,634,068</b>	<b>\$101,466,347</b>



# 410 INDEBTEDNESS OF THE UNITED STATES, OF THE STATES, ETC.

STATES AND TERRITORIES.	ASSESSED VALUATION.			TAXATION.			
	Real estate.	Personal property.	Total.	State.	County.	Civil divisions less than counties.	Total.
<b>SOUTHERN STATES.</b>							
Virginia.....	\$233,601,599	\$4,553,536	\$238,155,135	\$1,913,492	\$1,170,413	\$1,553,297	\$4,642,202
West Virginia.....	105,000,399	87,622,705	192,623,104	581,202	769,133	1,066,689	2,056,979
North Carolina.....	101,709,326	54,390,376	156,100,202	706,903	986,956	222,273	1,916,132
South Carolina.....	77,461,670	56,093,465	133,555,135	743,710	554,164	542,109	1,839,983
Georgia.....	189,983,941	99,488,658	289,472,599	1,075,099	1,076,421	1,055,488	3,207,008
Florida.....	18,385,151	12,053,153	30,438,304	286,930	266,306	101,944	655,180
Alabama.....	77,374,008	45,498,220	122,872,228	990,346	682,851	388,781	2,061,973
Mississippi.....	79,469,530	31,158,599	110,628,129	553,370	1,595,444	235,661	2,384,475
Louisiana.....	122,962,297	87,500,142	210,462,439	1,771,084	710,573	1,914,219	4,395,876
Texas.....	205,508,924	114,855,591	320,364,515	2,188,540	1,685,907	694,269	4,568,716
Arkansas.....	55,760,388	30,648,976	86,409,364	715,238	734,974	888,878	1,839,909
Kentucky.....	265,083,968	85,473,063	350,557,031	1,593,067	1,628,113	1,952,832	5,201,017
Tennessee.....	195,644,200	16,134,398	211,778,598	656,087	1,488,126	644,568	2,788,781
Total.....	\$1,677,047,248	\$698,076,021	\$2,375,123,269	\$13,782,063	\$13,344,391	\$10,480,958	\$37,507,417
<b>WESTERN STATES.</b>							
Ohio.....	\$1,093,677,705	\$440,682,808	\$1,534,360,513	\$4,480,489	\$6,131,502	\$15,144,667	\$25,756,658
Indiana.....	583,683,239	189,131,892	772,815,131	2,493,968	4,031,029	*4,813,688	*10,343,680
Illinois.....	575,441,053	211,175,341	786,616,394	3,195,042	5,278,956	*10,809,415	*19,283,418
Michigan.....	432,861,884	84,504,475	517,366,359	1,688,560	1,804,512	5,189,877	8,682,949
Wisconsin.....	344,788,721	94,188,080	438,976,801	467,435	1,995,990	*3,884,882	*5,388,825
Iowa.....	297,254,342	101,416,909	398,671,251	827,285	4,280,091	*5,154,229	*10,261,605
Minnesota.....	208,446,761	54,581,906	263,028,667	726,399	1,251,888	*1,735,420	*3,713,707
Missouri.....	381,985,112	150,510,639	532,495,751	2,125,278	2,885,503	5,255,955	10,269,786
Kansas.....	108,492,049	52,459,640	160,951,689	883,189	2,060,873	*1,470,804	*2,441,820
Nebraska.....	55,073,375	35,512,407	90,585,782	855,465	1,522,229	914,756	2,172,481
Colorado.....	35,604,197	35,867,496	71,471,693	372,359	1,209,808	569,841	2,152,008
Nevada.....	17,941,030	11,350,429	29,291,459	161,101	619,169	91,403	871,673
Oregon.....	32,584,966	19,937,113	52,522,079	464,229	454,699	195,014	1,113,942
California.....	466,273,565	118,304,451	584,578,016	8,215,177	4,059,471	5,355,357	12,625,005
Total.....	\$4,584,047,039	\$1,608,213,536	\$6,192,260,575	\$21,440,989	\$37,583,725	\$69,541,388	\$118,567,952
<b>TERRITORIES.</b>							
Arizona.....	\$3,922,961	\$5,347,253	\$9,270,214	\$55,620	\$220,471	\$16,945	\$293,086
Dakota.....	13,333,918	6,987,612	20,321,530	101,000	296,692	79,765	476,066
Idaho.....	2,297,526	4,143,350	6,440,876	48,456	139,088	8,343	195,837
Montana.....	5,077,162	13,592,640	18,669,802	55,529	317,337	10,781	388,947
New Mexico.....	4,788,764	6,574,642	11,363,406	66,228	70,719	.....	126,942
Utah.....	11,779,344	9,995,995	21,775,339	148,550	156,706	180,882	495,238
Washington.....	11,395,928	12,474,770	23,870,698	71,796	893,150	40,471	505,417
Wyoming.....	4,435,291	9,186,538	13,621,829	81,729	136,000	12,499	230,223
Total.....	\$60,020,839	\$68,192,740	\$128,213,579	\$619,912	\$1,729,163	\$299,656	\$2,648,761
Grand total.....	\$13,036,766,925	\$3,866,226,618	\$16,902,993,543	\$52,019,955	\$69,606,571	\$180,574,168	\$302,200,694

\* The taxes of townships are not included in this sum. Township officers, in so many cases, combined the school-district taxes with those of the township proper, that it was found necessary to ignore the reports made by them. The taxes of the township proper thus omitted in the detailed exhibit of States and in the above summary are estimated as follows: Indiana, \$1,500,000; Illinois, \$5,302,605; Wisconsin, \$1,750,000; Iowa, \$500,000; Minnesota, \$540,849; Kansas, \$564,829. These amounts being added to the taxes of corporations exhibited in the tables give the following sums as the total taxation of minor civil divisions for local purposes: Indiana, \$5,313,638; Illinois, \$16,112,020; Wisconsin, \$5,134,882; Iowa, \$5,954,229; Minnesota, \$2,275,769; Kansas, \$2,035,633; and for the group of Western States, \$69,999,071. The total taxation of the States under consideration is thus increased to the following amounts (the total of Minnesota being further enlarged as explained afterward): Indiana, \$12,343,630; Illinois, \$24,586,015; Wisconsin, \$7,588,325; Iowa, \$11,061,605; Minnesota, \$4,346,300; Kansas, \$4,979,650; and the grand total of the group of Western States to \$129,117,979. The total taxation for the United States of minor civil divisions for local purposes is thus increased to \$191,031,951, and the grand total of all taxation for the United States to \$312,750,721. It is to be noted in regard to Minnesota that a special State tax (not shown in the tables) laid in the census year upon certain counties, known as the "seed-grain" tax, amounting to \$92,244, is likewise included in arriving at the total taxation of that State.

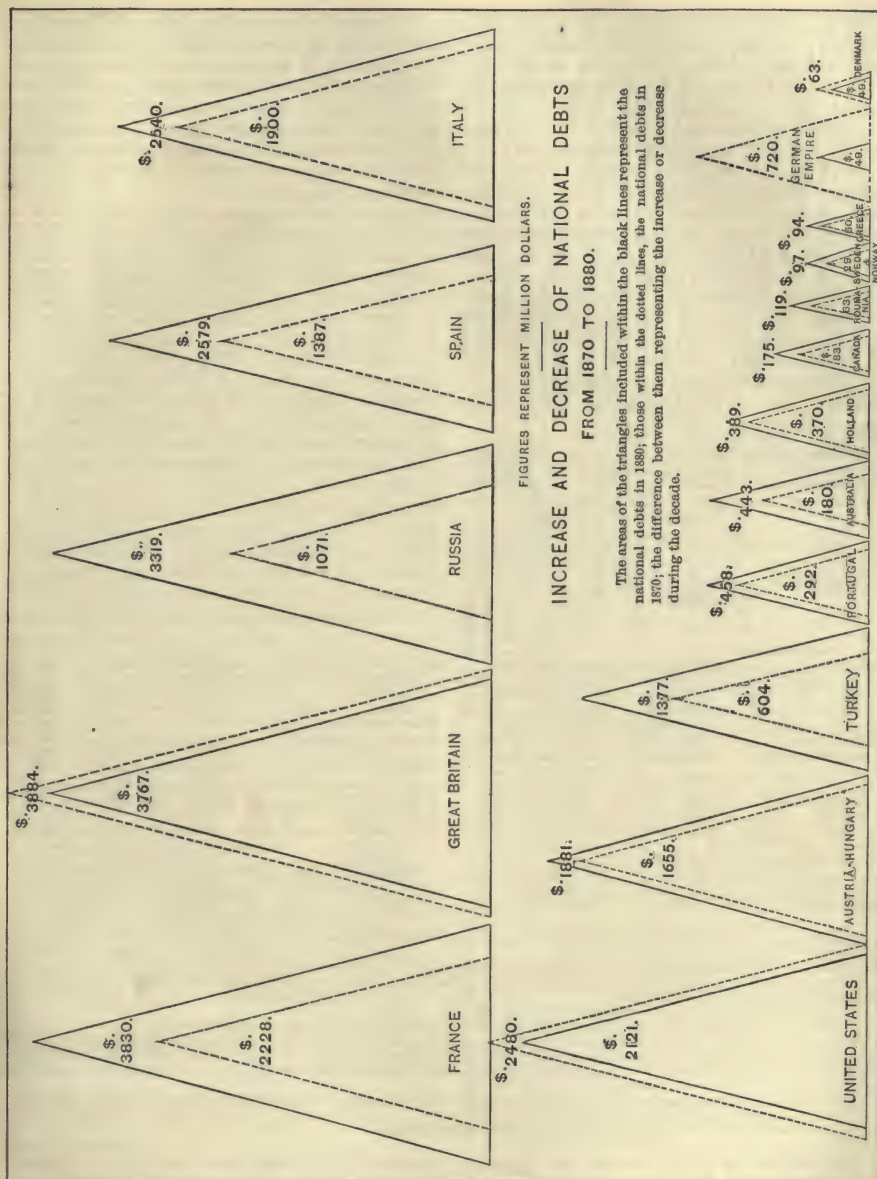
It thus appears that the amount of the assessed valuation is \$16,902,993,543; and the total amount of State and local taxation is \$302,200,694. If to this amount of taxation there is added the taxation by the Government of the United States, which is laid entirely on personal property, and consists of the receipts from internal revenue for the fiscal year ending June 30, 1881 (\$135,264,385), and the receipts from customs for the same period (\$198,159,676), the gross amount of money drawn from the people in 1880-'81, to defray the expenses of their civil and political institutions, was \$635,624,755. This taxation is about three fourths of one per cent of the val-

uation, and amounts to \$10.81 for every man, woman, and child in the country.

**NATIONAL DEBTS OF THE WORLD.**—A very large proportion of the debts of the civilized world have accumulated since 1848, at which date the aggregate was placed by the best authorities at \$7,627,692,215. In 1860 they had increased to \$10,399,341,688; in 1870 to \$17,117,640,428; and, in 1880, to \$23,286,414,753.

**DEBT OF FRANCE.**—France has the largest national debt, which amounts to \$3,829,982,339. At the fall of the first Napoleon it amounted to \$141,635,200. It has chiefly increased by expensive wars. The Crimean War cost France about \$450,000,000.





The following statement shows the progress of the debt during the last thirty years:

	Fixed and floating.
1850.....	\$975,166,500
1851-59.....	1,167,960,000
1854-55.....	1,333,421,000
1856.....	1,640,010,500
1857.....	1,718,008,000
1858.....	1,829,804,000
1859.....	1,810,338,000
1860.....	1,849,270,000
1870.....	2,277,522,000
1880.....	3,829,982,399

DEBT OF ENGLAND.—According to the statement of Mr. Dudley Baxter, one of the best authorities on national debts, the debt of England commenced after the Revolution of 1688, and passed the debt of France about 1750; advanced during the wars of the elder Pitt; made a longer stride in the eight years of the American War, and finally the great French Wars, from 1793 to 1815, made it tower over the debts of all other nations. The funded

debt in 1700 was, exclusive of annuities, \$61,317,900; but in 1763 it had reached nearly \$647,244,500. After a reduction of \$27,252,400 during the eleven years of peace that followed the American War, in ten years it doubled in amount, and with \$145,885,000 capitalized value of terminable annuities, left it in 1784 at \$1,328,554,500. During the next ten years a second reduction of \$16,546,100 was made, when the French War that followed, in twenty-one years, added \$3,022,096,500, and made the total debt and terminable annuities amount, in 1815, to \$4,389,583,000. Thirty-nine years of peace now diminished it \$496,383,000. The Crimean War of two years raised it with annuities, in 1856, to \$4,058,761,000. A reduction has since ensued, so that in 1877 the amount of the debt was \$3,879,368,565.

The amount of this debt added by three wars was as follows:

Seven Years' War, 1756-'63.....	\$291,990,000
American War, 1775-'83.....	486,650,000
French and American War.....	2,919,900,000

**DEBT OF RUSSIA.**—The debt of Russia has been made up largely of deficits arising during the issue and depreciation of paper money. The depreciated currency under one form has been removed by the forced issue of similar currency under another form. Nevertheless, the Government has never failed in its obligations to foreign creditors. The progress of the debt has been as follows:

1853.....	\$608,312,500
1854.....	642,875,000
1855.....	579,118,500
1856.....	802,972,500
1857.....	1,004,982,250
1858.....	1,167,960,000
1859.....	1,124,161,500
1870.....	1,070,680,000
1880.....	3,318,953,000

**DEBTS OF OTHER COUNTRIES.**—The lack of space will not permit a further relation of the details of the debts of the other countries of the civilized world. The gross amounts are, however, presented in the following tables, with percentage of increase or decrease, from 1848 to 1880:

COUNTRIES.	1848.	1860.	Per cent 1848-'60.		1870.		Per cent 1860-'70.		1880.		Per cent 1870-'80.		Per cent 1848-'80.	
	Amount.	Amount.	Increase.	Decrease.	Amount.	Increase.	Decrease.	Amount.	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.
France.....	\$885,703,000	\$1,854,136,500	109.3	...	\$2,277,522,000	29.8	...	\$3,829,962,399	68.1	...	332	...	...	...
Great Britain.....	3,990,530,000	3,893,200,000	...	2.4	3,888,487,000	0.25	...	3,766,671,000	...	8.0	...	5.6	...	...
Russia.....	486,650,000	1,124,161,500	131.0	...	1,070,680,000	4.76	...	3,318,953,000	210.0	...	582	...	...	...
Spain.....	494,914,500	525,582,000	...	4.4	1,886,952,500	169.8	...	2,579,245,000	85.9	...	369	...	...	...
Italy.....	145,995,000	437,985,000	200.0	...	*1,900,000,000	338.8	...	2,540,313,000	38.7	...	1,640	...	...	...
United States.....	47,044,862	64,842,238	37.8	...	2,480,672,428	8,725.7	...	†2,120,415,371	...	14.5	4,407	...	...	...
Austria-Hungary..	603,312,500	1,168,093,500	91.2	...	1,654,610,000	42.3	...	†1,881,115,350	13.7	...	209	...	...	...
Turkey.....	...	160,594,500	...	...	603,446,000	275.7	...	1,376,486,500	128.1	...	†757	...	...	...
Portugal.....	82,730,500	136,262,000	64.7	...	291,990,000	114.3	...	457,451,000	56.6	...	458	...	...	...
Australia.....	...	...	...	...	180,060,500	...	...	442,851,500	145.9	...	...	...	...	...
Holland.....	497,321,590	442,351,500	...	11.0	369,554,000	10.48	...	389,820,000	5.3	...	...	21.8	...	...
Canada.....	82,115,900	...	...	...	82,780,500	...	...	175,194,000	111.7	...	445	...	...	...
Roumania.....	...	...	...	...	63,000,000	...	...	\$118,742,600	88.5	...	...	...	...	...
Sweden & Norway.	2,919,000	38,932,000	...	...	29,199,000	...	...	97,330,000	239.3	...	3,283	...	...	...
Greece.....	43,665,000	38,932,000	...	20.0	160,000,000	54.1	...	\$94,361,485	57.8	...	94	...	...	...
German Empire†.	194,660,000	494,436,400	154.0	...	720,242,000	45.7	...	†49,817,598	98.2	...	75.0	...	...	...
Denmark.....	54,626,438	63,264,500	15.8	...	63,264,500	...	...	48,665,000	23.0	...	11.0	...	...	...
Total.....	\$7,627,692,215	\$10,899,341,688	...	...	\$17,117,640,428	...	...	\$23,286,414,758	36	...	...	...	...	...

\* Debt in 1868 by Baxter given as \$1,776,272,500; no authorities for 1870; amount stated approximately.

† The debt November 30, 1881, was \$2,009,704,370.18; but, as no data could be obtained from other countries for that date, it would not be a fair comparison.

‡ Debt of 1878, Kolb; no authority for 1880.

§ Debt in 1868 by Baxter given as \$58,898,000; no authority for 1870; amount stated approximately.

¶ The debt given for the German Empire in 1880 does not include any of the debts of states composing it, but only the empire proper. The amounts given for this country in 1870, and previous, represent the debt of the old German federation, which debt having been pro-rated among the different states since 1870, and in greater part paid off by the new empire, has thereby been reduced to the amount given in 1880.

Note.—1848 taken from Baxter's figures; 1860 taken from Levi's figures; 1870 taken from Mulhall's figures; 1880 taken from Mulhall's figures and report of Secretary of the Treasury. Amounts marked a are from Treasury report as being correct; balance are Mulhall's, Treasury report not being definite enough.

The following table presents an imperfect statement of the debts of certain other countries, from which the information is incomplete:

COUNTRIES.	1848.	1860.	1868.	1870.	1878.	1880.
Morocco.....	...	...	...	...	*\$2,438,250	...
Japan.....	...	...	*\$42,070,892	...	...	...
Cuba.....	*\$2,676,575	...	\$3,711,035	...	...	...
Mexico.....	*48,665,000	†\$14,599,500	*384,483,500	...	...	...
South America (republics and Brazil)...	...	...	*572,938,045	†\$681,310,000	...	†\$1,094,962,500
Servia.....	...	...	...	...	...	\$5,850,644
Switzerland.....	...	...	...	...	...	\$5,710,870
South Africa.....	...	...	...	...	...	\$58,398,000
Egypt.....	...	...	...	†\$783,000	...	\$449,920,578
India.....	...	...	...	...	...	\$708,497,434
	\$243,325,000	...	...	...	...	...

\* Baxter.

† Levi.

‡ Mulhall.

§ Treasury reports.



**TOTAL INCREASE.**—The total increase of the national debts of the world, from 1848 to 1880, is shown in the following figures: 1848, \$7,628,000,000; 1860, \$10,399,000; 1870, \$17,118,000; 1880, \$23,287,000. This is an increase of sixteen thousand millions in a period of thirty-two years, or five hundred thousand millions in each of the thirty-two years before 1881.

**INDIA**, an empire in Asia, subject to the British crown. The government is carried on in the name of the Queen of Great Britain and Ireland, who in 1877 assumed the title of Empress of India. The legislative and executive powers are united under the control of the Secretary of State for India, in the British Cabinet, who is responsible only to the British Parliament. Under his directions or supervision the executive authority is exercised by the Governor-General, or Viceroy, and the laws are elaborated by the Governor-General in council. The council of the Governor-General consists of five ordinary members and the commander-in-chief of the military, appointed by the crown, who preside over the departments of Foreign Affairs, Finance, the Interior, Military Administration, and Public Works; but their functions are simply administrative. The governors of presidencies and provinces are appointed by the crown, the lieutenant-governors of provinces by the Governor-General, subject to the approval of the Secretary of State for India.

The Secretary of State for India was the Marquis of Hartington, until the latter part of 1882, when he was succeeded by Earl Derby. The Governor-General of the British Indian Empire is the Marquis of Ripon, who succeeded Lord Lytton upon the accession of the Gladstone Government in 1880.

**AREA AND POPULATION.**—The preliminary results of the enumeration of February, 1881, as compared with the first general census, taken between 1868 and 1876, with the area of the states of British India, were as follow :

PRESIDENCIES AND PROVINCES.	Square miles.	Population, 1868-'76.	Population, 1881.
<b>Under the Governor-General:</b>			
Ajmere.....	2,711	396,889	453,076
Berar.....	17,711	2,227,654	2,670,982
Mysore.....	24,744	5,055,412	4,156,899
Coorg.....	1,572	163,812	173,283
Andaman and Nicobar Islands (1880).....	3,285		25,945
<b>Under Governors:</b>			
Madras.....	140,833	31,672,613	30,839,131
Bombay (including Sind).....	126,445	16,949,206	16,958,422
<b>Under Lieutenant-Governors:</b>			
Bengal.....	155,997	60,502,897	63,822,920
Northwest Provinces.....	81,748	39,781,204	32,099,436
Punjab.....	107,010	17,611,498	18,794,260
<b>Under Chief-Commissioners:</b>			
Oude.....	24,213	11,220,232	11,407,625
Central Provinces.....	34,203	8,201,519	8,173,824
British Burmah.....	87,220	2,747,148	3,707,646
Assam.....	45,308	4,162,019	4,815,137
<b>Total British administration.</b>	<b>902,500</b>	<b>191,096,608</b>	<b>203,159,156</b>

The area and population of the native states were as follow :

NATIVE STATES.	Square miles.	Population.
<b>Under Governor-General of India.....</b>	<b>312,070</b>	<b>31,754,651</b>
<b>Under the Lieutenant-Governors of—</b>		
Bengal.....	37,988	2,928,440
Northwest Provinces.....	5,125	745,675
Punjab.....	114,742	8,853,282
Central Provinces.....	29,112	1,049,712
<b>Under the Governors of—</b>		
Madras.....	9,818	3,001,436
Bombay.....	66,403	6,941,631
<b>Total native states.....</b>	<b>575,193</b>	<b>49,674,827</b>

Berar and Mysore, included in the first table, were only temporarily under British administration. Mysore was handed over to the native government in March, 1881. The native states exceed 450 in number. Some of the frontier states, like Nepaul, merely acknowledge British protection. The Afghan war brought Afghanistan, with an area equal to that of the British Islands and a population estimated at 4,000,000, under a British protectorate. The other native states are feudatory, paying tribute or furnishing a military contingent.

The British-born population of India, exclusive of the army, numbered, in 1871, 64,061 persons, of whom 38,946 were males and 25,115 females. The European community is mainly confined to Lower Bengal and Bombay. It has received large accessions of late years from British workmen brought over to labor on the railroads and other engineering and manufacturing enterprises. The result has been the growth of a degraded class of Europeans and Eurasians, who, unable to compete with native labor, and without the education for employments which would afford them subsistence, are driven to infamous occupations, or sink into pauperism. An investigation, instituted by the Marquis of Ripon, shows that of about 26,000 European and Eurasian children in India nearly one half are growing up without any education.

The religious statistics of British India, as ascertained by enumerations taken in the years 1868-'76 and verified by the returns of the general census, were as follow :

CREEDS.	Numbers.
Hindoo.....	139,248,563
Mohammedans.....	40,882,287
Buddhists.....	2,832,531
Sikhs.....	1,174,436
Christians.....	897,216
Other creeds.....	5,102,823
Not known.....	1,977,400
<b>Total.....</b>	<b>192,115,831</b>

The classification of the adult male population of British India, as to occupations, is as follows :

OCCUPATIONS.	Adult males.
Officials and the professions.....	2,404,855
Domestic service.....	4,137,429
Agriculture.....	37,462,220
Commerce.....	3,440,951
Industries.....	8,746,508
Laborers.....	8,174,600
Independent and non-productive.....	2,264,838
<b>Total.....</b>	<b>66,631,416</b>

The population of the principal cities was as follows in 1881: Calcutta, 683,458 (without the suburbs; with which the population, at the former enumeration, was 794,645); Bombay, 753,000; Madras, 405,948; Lucknow, 261,485; Benares, 207,570; Agra, 137,908; Allahabad, 150,378; Cawnpore, 119,603; Bareilly, 101,688; Rangoon, 132,004.

COMMERCE.—The total imports of the Indian Empire increased, with considerable fluctuations, from £39,913,942 in 1871 to £52,821,398 in 1880. The fluctuations are mostly in the importation of treasure. In the last five years the specie imports varied between £5,000,000 in 1876, £11,000,000 in 1877, £17,000,000 in 1878, £7,000,000 in 1879, and £11,000,000 in 1880, the exact figures for the latter year being £11,655,395. The merchandise imports increased in the ten years from £33,348,246 to £41,166,003. The total exports increased from £57,556,951 to £69,247,511. The exports of treasure averaged something over £2,000,000 a year. The growth in the merchandise export trade was from £55,336,186 in 1871 to £67,212,363 in 1880. The imports of bullion and coin in 1880 consisted of £2,050,393 of gold and £9,605,002 of silver. The exports were £299,889 of gold and £1,735,259 of silver; but in the preceding three years over £4,500,000 of gold were exported, being more than the imports and nearly equal to the exports of silver.

The exports from India to Great Britain in 1880 amounted to £30,117,980, and the imports of British products to £30,451,314. The consumption of British products has increased over 50 per cent in ten years; but the exports to England, owing to the decline in quantity and price of the cotton exports, have not increased in value. The exports of raw cotton were 3,843,491 cwts. in 1871. Cotton is still the largest article of export to Europe, the quantity in 1880 being 1,841,059 cwts., valued at £4,781,541. The next most important is jute, of which 4,633,327 cwts., valued at £4,014,699, were shipped in 1880. The exports of rice were 6,563,849 cwts., of the value of £3,134,556; of tea, 45,138,111 pounds, value £3,072,922; of hides, 463,764 cwts., value £1,616,634. Two thirds of the British imports into India consist of cotton goods, iron being the next largest article. Next to Great Britain, the countries having the largest trade with India are China, the Straits Settlements, and Ceylon.

The total value of imports in 1880-'81 rose to £62,114,000, £53,117,000 of which were merchandise and £8,997,000 precious metals; the exports to £75,995,000, of which £74,555,000 were merchandise and £1,440,000 precious metals. The exports of rice, paddy, and cereals were £12,385,000; of textile materials, £20,295,000; of opium, £13,600,000, against £14,323,000 in 1879-'80.

The number of vessels arriving in the ports of India in 1877-'78 was 6,353, of 2,877,649

tons, classified as follows: British, 1881, of 2,157,155 tons; Indo-British, 1,572, of 219,786 tons; foreign, 777, of 393,913 tons; native, 2,123, of 106,795 tons.

RAILROADS.—The contracts under which the Indian railroads were built, on the plan instituted by Lord Dalhousie, were exceedingly advantageous to the companies. Under this system 6,122 miles of road were constructed, for which nearly £100,000,000 was raised. Their net revenue is £6,210,775. During the viceroyalty of Lord Lawrence the system of state lines was inaugurated. On these the narrow gauge of 3 feet 3½ inches was adopted, instead of five feet six inches, as on the existing lines. The capital was mostly raised by state loans bearing from 3 to 4½ per cent interest. The construction and management have been intrusted to Government officers. As these lines were built purely for the object of developing the country and supplying the people with the means of communication, while all the profitable routes had been taken up by the companies which had built the first roads under state guarantees, they could not be expected to yield such returns as the guaranteed lines. Their cost, including 1,583 miles not yet constructed, was over £34,000,000, while the net revenue in 1881-'82 was only £741,939. The Government have recently returned to the policy of having the railroads built by private companies, although they do not grant as valuable privileges as formerly. The railroad network built on the two different plans is very extensive. It extends from Peshawar, in the extreme northwest, to Assam and the confines of China in the east, and from the foot of the Himalayas to Tutikorin, at the extremity of the peninsula. With the purchase of the East Indian line by the Government, the state railroads are equal in length with the guaranteed. Of the total mileage in 1880, aggregating 9,179 miles, 4,587 miles belonged to the state, and 4,592 miles to the guaranteed companies. The number of passengers carried vastly increased in ten years, being 48,040,940 in 1880, against 15,999,633 in 1869, during which period the mileage has about doubled. The gross receipts of all the lines in 1880 amounted to £12,099,593. The expenses were 51·17 per cent of the receipts. The total mileage in operation July 1, 1882, was 9,875 miles. About 500 miles have been laid out by native rulers. A line is under construction in Assam from Dibrugarh, on the Brahmapootra, which has steamboat communications with Calcutta, to Sadiya, the last British post in the direction of China. With the line from Attock to Peshawar now completed, the only link wanting in railroad communication between Calcutta and the northwest frontier is the projected bridge over the Indus, which will be a massive structure with two girder spans of 300 and three of 250 feet. A railroad system has been sanctioned which will open up new districts in the west of India.

POSTS AND TELEGRAPHS.—The number of let-



ters carried by the mails in 1880 was 128,567,058; of newspapers, 11,251,021. The postal traffic nearly doubled in the course of the decade. The number of messages sent by telegraph was 1,569,907. The number of miles of telegraph line was 20,468; of wire, 51,834, against 22,834 in 1871. The total receipts in 1880 amounted to £422,463, the working expenses to £292,291.

**ARMY.**—The strength of the European army in India in 1880 was 64,520 officers and men. In the estimates laid before Parliament for 1881-'82, 62,575 were provided for. The native army in 1880 mustered 124,978 officers and men, making a total force of 189,498. Indians impugn the truthfulness of the official statements regarding the native army, contending that it has been enormously reduced since 1856, and that a reduction of 9,000 men has taken place since 1878. The armies of the native princes of India in 1879 aggregated 305,235 men, with an artillery of 5,252 guns. The maintenance of the armed force necessary to uphold British rule in India is the heaviest branch of the Government expenditure, consuming more than the combined revenues from opium and salt. The cost of the army in 1877-'78 was £16,639,761; in 1879-'80, £21,712,862. The cost of the Indian contingent which fought in the Egyptian war under General McPherson is, like the expenses of the Afghan war, to be defrayed out of the Indian revenues. Several of the native princes made offers of men and money to assist in the Egyptian expedition. Among these were the chiefs of Nepal and Cashmere, the Begum of Bhopal, the Nawab of Bhawalpur, and the Rajahs of Patiala, Kapurthala, and Malerkotla. Similar assistance had been offered, and in some cases accepted, in the Afghan war. The motives were principally to escape the reduction of their military forces which the British authorities are pressing. The native rulers are exceedingly sensitive on this point, while the British live in constant fear of these large armaments.

**NATIVE DISTURBANCES.**—A sanguinary conflict broke out in the spring in the chiefship of Kalahandi, or Karond, on the western slope of the East Ghauts, between the Khonds, who are the aboriginal inhabitants, and the Kultas, a class of Hindoo cultivators who perform most of the agricultural work of the country. The two races have long entertained hostile feelings for each other. In January the Khonds commenced depredating the Kulta villages. In May the troubles took the serious form of wholesale massacres. As many as 100 Kultas were put to death with shocking barbarity. The energy of the civil magistrate in charge of the district prevented the outrages from being much worse. A regiment of Madras infantry arrived soon and put an end to the violence. The Khonds attempted to face the troops only on one occasion, when they were speedily dispersed with a loss of about twenty.

In Nepal, a border state which is nominally

independent, a serious conspiracy was discovered at the beginning of the year. The new King is a mere puppet in the hands of Sir Rindip Singh, the Prime Minister, and Shumshere Jung, commander-in-chief, both of which posts were filled by the late Sir Jung Bahadur, a distinguished Indian statesman. The commander-in-chief was unpopular in the army, which desired to be commanded by General Juggut Jung, the son of Sir Jung Bahadur. A conspiracy was concocted, which was betrayed by one of the conspirators, to throw a bomb into a room where the council of the commander-in-chief and other sirdars were assembled, and cut down all who attempted to escape. There were eighty-five persons arrested, of whom twenty-one boldly avowed their complicity, and were immediately put to the sword.

Salem, in Madras, was in July and August the scene of riot and violence, arising out of the antipathies between the Mohammedans and the Hindoos. The Mohammedans constitute only about one twelfth of the population. They have often been annoyed in their religious observances. Toward the end of July a Hindoo funeral procession, with music, was stopped while passing the mosques. A riot ensued, in which a couple of lives were lost. The fray was quickly stopped by troops from Bangalore. About the middle of August an organized attack was made by the Hindoos upon the Mohammedan community. Acts of hideous atrocity were committed. The streets were filled with corpses. The principal mosque was razed to the ground, and its splendid furniture destroyed. Dead pigs were thrown into wells with corpses of Mohammedan children. Military precautions were taken against another outbreak, and one hundred and sixty-three rioters were arrested and brought to trial. The original cause of the troubles was due to the action of the Municipal Council of the city, which purposely incited the funeral procession to take a route specially obnoxious to the Mohammedans. The councilors are chosen on the elective system. No Mohammedan had been elected a member.

**FOREIGN RELATIONS.**—Russia continues to strengthen her position and extend her influence in Central Asia. From her late enemies, the Tekke Turkomans, a military contingent, 5,000 strong, has been recruited. A railroad has been constructed from Krasnovodsk, on the Caspian, to Bami, and is to be continued to Sarakhs and Gorian. A treaty changing the boundary between the Russian Empire and Persia not only gives Russia ingress into the Persian plains, within the otherwise impregnable mountain barriers on the north and east, but brings her within striking distance of Herat, and would enable her forces to overrun Afghanistan and advance upon India without breaking the promise that Merv should not be occupied. The British endeavor to keep alive the loyalty of Abdurrahman, whom they placed on the Afghan throne, by liberal supplies of treasure out

of the Indian exchequer. Their agent in Cabool, Mohammed Afzul Khan, is, through his birth, education, and character, *persona grata* with the Ameer. The small but important province of Maimanah in Northern Afghanistan, which has often before attempted to throw off the yoke of the Ameer, has entered into relations with the Russians through the Turkomans, and with arms supplied by them rebelled against Abdurrahman. The approaching dissolution of the Khan of Bokhara, farther east, furnished the British ambassador in St. Petersburg with new material for diplomatic questionings and protests, which are usually treated by the Russians as empty formalities. With Bokhara a Russian province, the dominions of the Czar will extend to the Oxus from its source to its mouth, the limit prescribed by Lord Clarendon in 1872.

The dissipated King Thebaw of Burmah still holds out against the aggressive designs of the British. As the present home Government is not inclined to gratify the traders, eager for a new field of exploitation, and the military thirsting for action in India by new aggressions on the frontiers, the matter has hung in suspense since the hasty flight of the British embassy from Mandalay. An embassy was sent by the King to arrange the subjects in dispute, which ranged from the question of the British ambassador's wearing shoes at the Mandalay court to that of maintaining a fortified residency and guard, and forcing the Burmese Government to abolish its trade monopolies for the benefit of British merchants. The last question furnishes the key to the situation. It was this which called out vigorous representations from Lord Ripon to the court of Ava, that led to the sending of the Burmese envoys. When the Burmese Government sounded the position of the British authorities, it immediately recalled their ambassadors.

**LEGISLATION AND FINANCE.**—The most important sources of revenue are the land-taxes, the opium monopoly, and the salt-tax. Of the total revenue in 1880, amounting to £68,484,666, £22,463,548 came from the land, £10,319,162 from opium, and £7,266,413 from salt. The East India Company, in drawing more than half of the revenues of the Government from the land, continued the practice of former conquerors. The English found the ryots enslaved by rulers who treated the land as their own. There was no basis for peasant proprietorship but the ancient communal ownership. This was equally repugnant to their ideas as the plan of assuming the title to the whole country and the direction of all agricultural operations. They accordingly endeavored to abolish both the village communities and the overlying rights of the princes by cutting up the land into large estates, like those to which they were accustomed in England, and granting them in fee simple to the former tax-gatherers. The class of landlords thus created have not, however, been

treated as absolute owners. In the tax system and in the schemes for agricultural improvement, the idea of joint state ownership is retained, except in Bengal, where a permanent settlement was made in the last century; and in Benares, where the land was permanently settled about the same time. In the temporary settlements made in the other provinces, usually for thirty-year periods, the Government takes as its share about two thirds on the average of the annual profits from the land. The proportion grows less during the period of the settlement as the land improves in value. In some parts of India, as in Bombay and Madras, there are no zemindars, or large proprietors. In those provinces the ryots stand in the position of tenants from the Government, which can eject them when they fail to meet their annual assessments. In some districts village proprietorship still prevails. The Marquis of Ripon, pursuing the policy of decentralization inaugurated by Lord Mayo, has assigned additional heads of revenue to the unfettered control of the provincial governments, and also a fixed proportion of the land revenue, varying from 22 per cent in the Northwest Provinces to 50 per cent in Bombay, and averaging about 33 per cent. The reform is to be carried still further by placing the receipts and expenditures in the charge of local bodies, composed of non-official and elective members. These local boards are expected to aid in devising the system of taxation best suited to the character of the people. The smallest administrative divisions will be the *taluka* or the *tahsil*, not larger than counties. These bodies, municipal and rural, will be composed for the most part of representative, non-official natives, whose action will be revised, but not inspired, by the bureaucratic authorities. The employment of natives in the civil service is increasing. Major Baring reports that, out of 4,082 appointments in the covenanted and uncovenanted services, 2,024, or as nearly as possible one half, are held by natives.

The financial estimates for 1882-'83 place the revenue at 664,590,000 rupees, and the expenditure at 661,740,000 rupees. The railway receipts are counted at 4,680,000 rupees less than in 1881-'82; the loss by exchange at 5,190,000 rupees less, the rupee being calculated at 1s. 8d. The military expenditure is estimated at 155,920,000 rupees, being less than in any year since 1877. The Government carries out this year two bold and somewhat hazardous measures of fiscal reform—the repeal of the import duties and the reduction of the salt impost—in addition to further steps in the direction of decentralization and local self-government which involve losses to the Imperial Treasury.

The Indian Government have made the expected clean sweep of the remaining import duties in obedience to the desires of British manufacturers and in defiance of public opin-



ion in India. The resentment against this unpopular measure was embittered by the reflection that English pressure had brought about a condition of affairs in which England was actually protected against Indian products, since Indian silver-work, for instance, must pay a heavy import duty in England, while the Indians must admit British silverware free, and in which Indian tea and tobacco must pay high duties in England, while free entry is given to China teas and foreign tobacco in India. The chief of the custom imposts was the duty on cotton fabrics, which yielded in its curtailed form but little revenue, yet protected the Indian manufacturers from Manchester competition. The only duties retained are those on wines and spirits, opium and salt, and those on arms and ammunition; the first to balance internal imposts, and the latter for political reasons. A more important fiscal reform is the reduction of the salt-tax. This oppressive impost is lowered to two rupees per maund (82 pounds), and is made uniform all over India. The reduction amounts to 80 per cent in Bengal, and 20 per cent in the other provinces. The tax per capita is about ten cents, which is equal to two days' wages for field-labor. The duty in Burmah and in the Punjab districts was already lower than this, and has not been altered. The Government wisely granted this relief to the poorer classes instead of removing the obnoxious license-tax imposed on traders. This objectionable tax has encountered vehement opposition from the beginning, and the Government has lessened its evil effects by exempting all whose incomes are less than 500 rupees; but it insists on keeping it in force, not only because it is an indispensable source of revenue at present, but as a precedent which will render easier the introduction in the future of an extensive and more rational system of direct taxation. The Indian authorities refuse to entertain the notion of giving up the Bengal opium monopoly. It is in reliance upon the increased receipts from this source that a revenue, estimated for 1882-'83 at 11,080,000 rupees, or half that many dollars, from the import duties, has been abandoned, and a reduction to the amount of 14,230,000 rupees made in the salt-tax. The only evil in the opium revenue in official eyes is the uncertainty of the yield. The contingency of a bad year has usually been guarded against by purposely underestimating the income from opium in the financial statements. To make up for the remitted taxes, the estimate must be placed for the present at higher figures than have been customary in the future Indian budgets. This is perhaps warranted by the increased gross revenue and the diminished cost of collection. In the budget for 1882-'83, Major Baring estimates the net receipts from opium at 72,500,000 rupees, whereas in 1881-'82 they were entered in the estimates as 65,000,000 rupees. The present estimate is 6,000,000 rupees less than the probable re-

ceipts in 1881-'82, and less by twice that amount than the actual receipts in 1880-'81. The danger of relying solely on this one source to make good the surrendered revenues is seen from the fact that in the preceding ten years (1871-'80), the average net annual receipts from opium were only 68,100,000 rupees, and that for three years together (1875-'77) they never exceeded 63,000,000 rupees. Short crops for the last three years had obliged the Government to draw heavily upon the reserve stock, and doubts were expressed whether they can continue to supply 56,490 chests of Bengal opium per annum. Meanwhile the native Chinese and the Persian production are increasing, and the prices must sink; so that a permanent reduction in the opium revenue may be looked for before long. Some elasticity in the general finances can undoubtedly be counted on; for grievously as the people are ground down by taxation and many oppressions, war or famine may not visit them again soon, and capitalists are slowly improving the productive resources of the land. The abatement of the salt duty will aid in the process of recuperation.

INDIANA. STATE GOVERNMENT.—The State officers during the year were as follow: Governor, Albert G. Porter, Republican; Lieutenant-Governor, Thomas Hanna; Secretary of State, Emanuel R. Hawn; Treasurer, Roswell S. Hill; Auditor, Edward M. Wolfe; Attorney-General, Daniel P. Baldwin; Superintendent of Public Instruction, John M. Bloss; Secretary of Board of Agriculture, Alexander Herne; State Librarian, Mrs. Emma Winsor; Judiciary, Supreme Court: William E. Niblack, James L. Worden, George V. Howk, Byron K. Elliott, Horace P. Biddle, and William A. Woods.

The general condition of the State during and at the close of the year was prosperous. The Governor, in his message to the Legislature, says:

The circumstances under which you assemble could not well be more satisfactory. The condition of the State has never been more prosperous. During the year just ended the products of our fields have been unusually abundant. Our manufacturing and mining industries have yielded good returns. Within the past year 560 miles of railway have been built within the State—a larger number than in any previous year. Of the ninety-two counties in the State, there are only four through which railroads do not pass, and three of these, happily, border on the Ohio River. More than 225,000 acres of land have during the year been brought for the first time into cultivation. The practice of underdraining soils charged with an excess of moisture has never been so energetically prosecuted. Along with it has come increased productiveness, and a lessening of all malarial diseases. Our common schools, under the careful superintendence of a diligent and capable officer, have increased in usefulness and in public favor.

FINANCES AND RAILROADS.—From the report of the Auditor of State for the year ending October 31, 1882, it appears that the cash in the Treasury November 1, 1881, was \$740,650.72. Add to this the net cash receipts during the year, amounting to \$3,067,843.50, and the

aggregate, from all sources, is \$3,808,494.22. Deducting the cash disbursements, \$3,110,424.74, there is left, making a cash balance chargeable to the Treasury, at the date of the report, \$698,069.48.

The foreign and domestic debt of the State, as it now stands, is as follows: Foreign—five per cent stock outstanding, \$16,469.99; 2½ per cent stocks outstanding, \$2,355.13; 5 per cent bonds due December 1, 1889, \$200,000; 5 per cent bonds, \$385,000; 5 per cent non-negotiable bonds, due April 1, 1901, \$340,000; twenty-four internal improvement bonds, past due, \$24,000; six 5 per cent internal revenue bonds, due July 1, 1886, \$6,000. Domestic debt—six per cent non-negotiable bonds, due the common-school fund, \$3,904,783.22. Total debt of the State, \$4,876,608.34.

The Auditor estimates that the expenses of the executive and administrative government in 1884 will be \$68,170, and in 1885 \$68,770. The judiciary expenses are estimated at \$187,200 for each year. Other expenses are estimated as follow, for each of the two years: Educational, \$28,500; benevolent, \$317,000; penal and reformatory, \$211,500; public printing and advertising, \$12,000 for 1884 and \$24,000 for 1885; interest on non-negotiable school-fund bonds and temporary loan, \$281,000; general expenses, \$8,500; legislative expenses for 1885, \$120,000. Total for 1884, \$1,113,870. Total for 1885, \$1,246,470.

The value of the real and personal property of Indiana in 1881 amounted to \$805,202,792, of which \$261,775,350 was personal. The total amount of taxes on the different county duplicates of the counties of the State for all purposes was \$10,627,014.75.

The aggregate of county expenditures was \$4,070,589.07.

The table in the next column shows the number of miles of railroad operated in the State by each company named, together with the rate of assessment per mile, and the total assessment fixed by the State Board of Equalization. The total assessment given includes the main and side tracks, improvements, and rolling-stock of each company; but only the miles of main track are given. The whole number of miles of side-track in operation is 802.09, and the assessment upon it reaches \$2,256,713. The rolling-stock includes 4,764.26 miles, assessed at \$9,179,082, and the improvements on the right of way in daily use by all railroads are taxed at \$1,073,781.

EDUCATION.—The number of persons in the State of school age, viz., between the ages of six and twenty-one years, is 709,424. The number admitted to the schools was, in 1882, 498,792. The average daily attendance of pupils last year was 305,513. The number of school-teachers is 13,259. The number of school-houses in the State is 9,556, of which 48 are log, 83 are stone, 2,481 are brick, and 6,944 are frame.

The amount of the public-school fund is

NAMES OF ROADS.	Miles.	Per mile.	Total.
A., L. and St. Louis.....	19.37	\$2,000	\$39,468
A., C. and Southern.....	14.47	2,500	67,538
Baltimore, O. and Chicago.....	146.32	9,000	1,556,612
Bedford, S. and B. ....	41.36	1,200	65,802
Belt R. R. and S. Y'd.....	12.10	25,000	302,130
Bloomfield N. C. ....	34.00	1,200	56,550
Cairo and Vincennes.....	6.92	4,500	45,845
Chicago, Cincinnati and L.....	71.75	4,000	452,709
Chicago and Block Coal.....	10.75	2,000	42,563
Chicago and Eastern Illinois.....	8.57	4,000	50,670
Chicago and Grand Trunk.....	80.63	9,000	964,485
Chicago and W. Michigan.....	7.00	4,000	28,000
Cincinnati, R. and Ft. Wayne.....	85.77	4,500	446,142
Cincinnati, L. and Chicago.....	28.77	7,500	279,146
C., L., St. L. and C.....	153.75	9,500	2,195,854
Law'burg branch.....	2.57	4,000	28,171
C., H. and I.....	78.28	7,000	780,984
C., W. and Michigan.....	130.21	4,000	615,725
C., C., C. and I.....	83.84	11,500	1,545,097
Eel River.....	98.92	5,500	796,555
E., T., H. and C.....	62.68	6,500	520,416
Evansville and Terre Haute.....	108.40	3,500	1,345,670
L. and P. branch.....	12.00	3,500	50,260
F., F. and M.....	35.30	2,000	94,140
Fort Wayne and Jackson.....	52.90	5,000	284,205
Fort Wayne, C. and L.....	102.49	3,000	413,692
Frankfort and State Line.....	39.45	500	19,725
Grand Rapids and Ind.....	53.11	6,500	455,888
Havana, R. and E.....	8.50	1,500	24,225
I., B. and W.....	78.61	8,500	898,324
Springfield extension.....	52.86	4,500	235,720
I., D. and S.....	76.26	5,000	542,568
I., Peru and Chicago.....	72.84	7,500	756,828
Indianapolis and St. Louis.....	79.42	9,500	938,251
Indianapolis and Vincennes.....	116.44	4,000	601,106
Indianapolis Union Railway.....	3.23	86,950	145,349
Jefferson, Mad. and Ind.....	114.41	8,500	1,266,511
Madison branch.....	44.90	3,500	242,790
C. and S. Branch.....	28.86	3,500	124,026
S. and R. branch.....	18.82	3,500	96,138
Cambridge City extension.....	20.85	3,500	108,210
Joliet and Northern Ind.....	15.47	10,000	168,580
Lake Erie and Western.....	157.94	6,000	1,280,107
Lake Shore and Mich. South.....	167.71	18,000	4,345,400
Louisville, Ev. and St. L.....	173.85	2,500	602,425
Louisville and Nash.....	27.75	6,500	249,429
Louis., N. A. and C.....	374.07	5,000	2,438,524
Michigan City and Ind.....	17.75	4,000	91,293
Michigan Air Line.....	5.62	6,000	86,595
Michigan Central.....	42.41	18,000	120,760
New Castle and Rush.....	24.17	3,000	79,397
N. Y., C. and St. L.....	150.90	5,000	828,622
Ohio and Mississippi.....	171.05	9,000	1,960,222
Louisville branch.....	53.25	6,000	422,775
Peoria, D. and Evans.....	37.75	4,200	297,908
Pitts., Cin. and St. Louis.....	416.64	8,250	4,498,792
Pitts., Fort Wayne and C.....	162.57	15,000	8,706,920
Richmond and Miami.....	.....	.....	.....
Terre Haute and Ind.....	79.90	18,000	1,574,816
Terre Haute and Log.....	109.64	3,000	461,255
Terre Haute and S'n.....	40.00	4,000	202,099
Toledo, Cincinnati and St. L.....	92.48	2,000	224,197
Ver., G'g and Rush.....	44.39	3,000	175,898
Wabash, St. Louis and P.....	166.00	18,000	2,569,950
White Water.....	62.25	2,500	228,970
White River (King).....	.46	5,000	4,700
Richmond and Miami.....	7.96	6,000	75,665
Total.....	4,885.64		\$47,555,702

\$9,138,408.31. The addition made to it annually, taking as a basis an average of the past five years, exceeds \$54,000. This sum does not include the large sum (about \$260,000 a year) received from particular licenses and other sources, and applied each year to tuition.

The amount of tuition-money derived from interest on the school funds in 1882 was \$650,173.41. The whole amount received from State and local tuition taxes was \$2,059,616.44. The proportion of the entire expense of tuition paid from taxes, State and local, was 75 per cent.

During the year ending October 31, 1882,



the average enrollment of students in the State Normal School was 320. Seventy per cent are the children of farmers, ten per cent of mechanics, four per cent of merchants, six per cent of professional men, ten per cent of laborers, railroad men, etc. Since the organization of the school, in 1870, it has been attended by 3,500 students.

The General Assembly has invested all the endowment funds of Purdue University in one Indiana State bond of \$350,000, which yields annually \$17,000, an amount that is sufficient to pay the salaries of the members of the faculty. During the year ending October 31, 1881, the students were classified as follow: Post-graduates, 2; college classes, 90; school of chemistry, 11; industrial art, 25; agricultural, 2; mechanics, 10; academic, 141. Total, 254.

**PUBLIC INSTITUTIONS.**—The report of the trustees of the Deaf and Dumb Asylum, for the fiscal year ending with October, gives the following facts: The appropriation for the support of the institution was \$55,000, and of this amount \$52,816.87 was expended, leaving \$2,181.33 in the treasury. The appraised value of the property of the institution is \$457,782 in real, and \$35,527.05 in personal, making the total appraised value \$493,309.05. The number of pupils during the year was 383. Of these 44 were dismissed from the institution, and 342 remain. The cost *per capita*, exclusive of clothing, was \$156.30. The necessity for more buildings is urgent, and repairs upon the present property are needed. An appropriation of \$62,000 for annual expenses is asked for the next two years. Of the pupils now in attendance, 206 are males and 177 are females. The number of counties represented is 84, the largest number being 33, from Marion. Vanderburg County has 13 pupils, and Wayne, Tippecanoe, and Montgomery, each 11. During the year fifty-six applicants for admission were refused, for want of room to accommodate them.

In their twenty-sixth annual report the Trustees of the Blind Asylum state that the total resources of the institution during the year were \$29,210.80, and the total expenditures \$28,906.86. The cost of maintenance *per capita* was \$206.48, exclusive of clothing, for the year. The total number of persons now under the care of the asylum is 128. Additional room, for the accommodation of one hundred more pupils, is urgently needed.

In the Asylum for Feeble-Minded Children and Soldiers' Orphans' Home, an average of 235 children were cared for during the year, at \$127 *per capita*.

The thirty-fourth annual report of the Indiana Hospital for the Insane shows a total value of the property of the institution, real and personal, amounting to \$1,430,003.15. During the last year the revenue was \$245,000 for maintenance, \$12,000 for clothing, and \$7,500 for repairs, making a total of \$264,500. Disbursements amounting to \$233,519.84 were

made, \$216,690.52 being for maintenance, \$7,490.84 for repairs, and \$9,338.48 for clothing. During the year the daily average number of inmates was 1,085, who have been maintained at a *per capita* expense per annum of \$194. The Legislature is urged to complete the department for women, to meet the demand for greater accommodations. The number of cases refused admittance was 79, and over 200 chronic patients were discharged for this reason solely.

The number of patients treated was 1,827. Of those discharged 378 were restored to reason, 121 improved, 116 not improved, 10 were not insane, 2 were idiotic, and 105 died. The ratio of recoveries is 48 per cent, and of deaths 5.1% per cent. The superintendent recommends the construction of a central hospital, with a capacity of about four hundred patients, for the recently insane; and the use of the present institution, by slight alterations in the buildings, for the 1,800 chronic cases solely.

The annual report of the Superintendent of the House of Refuge shows that the current expenses of the institution were \$45,000. The State Treasurer received \$20,000 from counties, which was placed to their credit, and the earnings were \$3,000, leaving about \$22,000 to be paid by the State. There is an enrollment of 372 boys confined at the house, forty-nine of whom are colored. During the year 200 boys were refused admittance on account of lack of room for keeping them, and 182 were released. Of this number 95 per cent are doing well, and four former inmates have been sentenced to imprisonment in the Penitentiary. During the year a new laundry and new gymnasium have been added. In the system of conducting the school the boys are divided into eight families. One half of each day in the week is devoted to school duties, and the remainder to work. The mode of punishment is deprivation of privileges, slow promotion, and extension of term of confinement. Homes were found for sixty-nine, one was made an officer for exemplary conduct, and thirty-two boys, out on tickets-of-leave, were returned to the institution.

The annual report of the Board of Managers of the Indiana Reformatory for Women and Girls states that there are fifty-five convicts in the penal department, and thirty-three were received during the year. Twenty-two were discharged upon the expiration of their terms, and one released for a new trial. The number of girls in the reformatory department is 144. During the year fifty-one were committed and seven returned from tickets-of-leave. Twenty-one were discharged, forty released on tickets-of-leave, and one died. The average number of inmates during the year was 192, five more than in any previous year. The expenditures, including salaries, repairs, and improvements, amounted to \$28,000. The cost of maintaining and educating the inmates of the institution is \$2.39 a week each. The girls are instructed in the rudimentary branches, and,

where practicable, the illiterate prisoners are taught to read and write. The superintendent reports that, out of the number of inmates who were discharged during the year, 88 per cent are doing well. The average cost of maintaining infants committed to the institution is estimated at \$136 a year. The average sentence of the convicts received during the fiscal year is one year and six months. The oldest life-prisoner is now seventy-six years of age, and has served twenty-six years of the sentence. In summing up the condition of affairs the managers state that "the results of the work of the six years since the institution has been entirely controlled by women will, we think, compare favorably with those of the initial years of the movement when under the control of men."

The State Prisons at Jeffersonville and at Michigan City are more nearly self-supporting than they have been for several years. The average number of prisoners at the former prison during the past year was 564. The average number of prisoners at the prison at Michigan City was 621.

**STATISTICS.**—According to the report of the State Bureau of Statistics, the agricultural productions of the State in 1881 and 1882 were as follows:

CROPS.	1881.		1882.	
	Acres.	Yield.	Acres.	Yield.
Wheat, bushels.....	3,201,547	30,625,668	3,063,348	46,928,643
Corn, bushels.....	3,135,173	71,387,075	3,812,683	115,699,797
Oats, bushels.....	.....	14,898,617	684,822	19,615,516
Rye, bushels.....	15,839	208,912	36,695	584,405
Barley, bushels.....	26,296	526,361	44,242	1,188,717
Flax-seed, bushels.....	.....	.....	187,814	905,451
Tobacco, pounds.....	13,615	6,565,732	17,284	18,593,486
Hay, tons.....	988,560	1,303,217	984,982	1,599,948
Apples, bushels.....	.....	.....	.....	20,180,688
Peaches, bushels.....	.....	.....	.....	2,063,630
Irish potatoes, bush.....	.....	2,396,850	72,984	7,264,530
Sweet-potatoes, bush.....	.....	289,511	10,596	696,245

There are 233,082 pear-trees of bearing age in the State, 112,222 plum-trees of bearing age, and bearing quince-trees 52,933.

Taking the average prices of these productions as a basis for estimating their value, it would stand about as follows:

LEADING PRODUCTIONS OF 1882.		Home value.
Wheat.....	.....	\$44,552,211 00
Corn.....	.....	57,949,895 00
Oats.....	.....	4,492,344 48
Rye.....	.....	411,903 75
Barley.....	.....	910,973 60
Flax-seed.....	.....	950,723 25
Tobacco.....	.....	2,718,697 20
Hay.....	.....	22,399,286 00
Apples.....	.....	12,103,409 80
Peaches.....	.....	3,095,454 00
Irish potatoes.....	.....	3,632,415 00
Sweet-potatoes.....	.....	696,245 00
Total.....	.....	\$158,847,961 03

Tile-drainage is now largely resorted to.

The reports from thirty-one counties to the State Bureau of Statistics show that there was a reduction of the mortgage indebtedness on real estate during the year then expired of \$600,000. The counties embraced represent

about one fourth of the State, and will give a proportionate average for the entire State. Reports from twenty-three counties, just one fourth of the State, show an increase in the number of owners of real estate in the aggregate of 8,649.

According to the reports of the township assessors, the number of acres of timbered land in the State is 4,585,012. Benton, Starke and Newton Counties show the smallest acreage, and Harrison County has the largest in the State.

Indiana is now the fourth coal-producing State in the Union. It is expected that the new mines in Pike and surrounding counties will largely increase the supply. Pike and two of the adjoining counties are underlined with two immense beds of coal, extending under the whole section of that country. One of these seams runs from three to four feet and the other from seven to ten feet in thickness. The coal of this new district is not of the best quality, but will compare very favorably with other coals of the State. The seam is generally level. Most of the openings are drifts. The seams are reached in some places by slopes, and in a few places shafts are sunk. The region is crossed by the New Albany and St. Louis Air-Line and the Evansville and Indianapolis Railroads, and some of the coal has already been shipped to St. Louis markets.

The Bureau of Statistics has compiled a very full report upon the mineral resources of Indiana, from which the following comparative summary for the years 1881 and 1882 is taken:

MINERALS.	1881.	1882.
Sandstone, cubic yards.....	615,927	961,768
Lime, bushels.....	1,193,280	896,623
Cement, bushels.....	144,599	82,938
Coal mined, tons.....	2,125,977	1,418,520
Gravel sold, cubic yards.....	281,732	190,433
Fire-clay, tons.....	202,888	2,769
Limestone, quarried, cubic feet.....	2,743,459	3,094,750

A remarkable decrease is shown in the quantity of coal and fire-clay produced, and the amount of sandstone quarried is largely in excess of the year previous.

The following statistics of poultry are given:

POULTRY.	1880.	1881.	1882.
Chickens, dozen.....	662,940	558,491	628,286
Turkeys, dozen.....	53,713	28,067	44,039
Geese, dozen.....	48,848	26,408	25,403
Ducks, dozen.....	21,535	14,068	15,054
Guineas, dozen.....	4,748	2,410	2,976
Peafowls, dozen.....	.....	2,829	6,125
Eggs, dozen.....	.....	17,150,661	19,188,733
Feathers, pounds.....	518,757	346,681	310,733

The statistics of eggs include the production from all kinds of fowls; the feathers are only those picked from geese.

The Bureau of Statistics has also completed some interesting figures as to the churches of the State. The total number of church-buildings in the State is 4,462, and of church organizations 4,921. The number of members ad-



mitted to all denominations during the year was 43,839. The salaries paid to the pastors of these churches annually amount to \$1,246,913, and the other expenses aggregate \$295,965. The amount of money collected through the various religious organizations and expended for benevolent or charitable purposes amounted last year to \$187,227. There are 24,003 Sunday-school teachers, and they have 257,673 pupils. The average attendance on public religious services reaches 428,812. The value of church property is \$10,825,553. The Methodist Episcopal denomination leads, with 1,547 organizations and 118,949 members. The Christians follow, with the Baptists third, the United Brethren fourth, and the Catholics fifth, with 286 organizations, but the latter ranks second in number of members, having 86,872.

A report made by the same bureau shows the advance of manufactures in the State. The statistics show 12,088 different establishments, \$50,169,061 as the capital employed, and \$167,067,443 as the value of manufactured products. The value of the products is about \$19,000,000 more than reported by the census of 1880. The value of raw material used was \$94,296,477. The average number of males employed was 69,273, and of females 3,698, making a total of 72,971. The aggregate amount of the wages paid these employes was \$28,944,894.

**THE KANKAKEE SURVEY.**—In December, Professor John L. Campbell, appointed by the Governor, submitted his report upon the straightening of the channel of the Kankakee, and the drainage of the swamp-lands. The Kankakee region is chiefly within the counties of St. Joseph, Laporte, Starke, Jasper, Porter, Newton, and Lake. The number of acres which may be recovered in the marshy region is estimated as follows: In St. Joseph County, 39,633 acres; Laporte, 124,253; Porter, 75,544; Starke, 153,625; Jasper, 90,459; Newton, 79,854; Lake, 61,438; total, 624,806. Estimating the increase in value at \$20 an acre, the aggregate addition to the wealth of the State will be \$8,000,000, while the general increase of the entire section of the Kankakee region will make it not less than \$10,000,000. There are 2,000 bends in the Kankakee River between South Bend, Indiana, and Moline, Illinois, and the length of the stream is 240 miles. The cost of drainage is estimated at \$600,000, and the national and State Legislatures will be asked to undertake the work, so far as straightening and lowering the bed of the river is concerned, leaving to land-owners the work of lateral drainage.

**PARTY CONVENTIONS.**—Two amendments to the State Constitution were proposed by the last Legislature, one for the prohibition of the liquor-traffic, and the other to confer the right of suffrage upon women. The prohibition amendment was adopted by the following vote:

Yeas—Senators—Republican.....	20
Senators—Democratic.....	6—26
Representatives—Republican.....	44
Representatives—Democratic.....	11—55
Nays—Senators—Democratic.....	17
Senators—Republican.....	3—20
Representatives—Democratic.....	28
Representatives—Republican.....	8—36

This amendment formed the chief local issue in the fall campaign, the Republicans pronouncing in favor of its submission to the people at a special election, while the Democrats, pronouncing against it in principle, demanded its submission at a general election.

The Democratic State Convention, consisting of 1,121 delegates, met in Indianapolis, on the 2d of August, and adopted the following platform:

The Democratic party of Indiana, in convention assembled, renews its pledge of fidelity to the doctrines and traditions of the party as illustrated by the teachings of Thomas Jefferson, its founder, and exemplified in the administration of the Government under Democratic rule. And we insist upon an honest and economical administration on the principles upon which it rests—conceding to the Federal Government its just rights and full powers as delegated in the Federal Constitution, and claiming for the States and the people respectively the powers therein reserved to them.

We arraign the Republican party at the bar of public opinion for its long and continued course of usurpation and misrule. It has disregarded the rights of the people and the States. It has held on to its ill-gotten power in defiance of the popular will, by the corrupt use of money in the elections, and it has corrupted the public morals by elevating to high places men who are known to be dishonest.

We condemn the Republican party for enacting and enforcing laws designed to place the elections under Federal control, in violation of the rights of the State.

We condemn it for the fraud and perjuries of 1876, by which the will of the people was set aside, and a usurper placed in the presidential office for four years.

We condemn it for having kept up and maintained in time of peace an onerous and unjust system of taxation, by means of which large sums of money have accumulated in the Treasury, which ought to have been left in the pockets of the people; and we condemn it for its wasteful extravagance in the expenditure of the public money.

We condemn it for its shameless disregard of its pledges in favor of "civil-service reform," and its corrupt use of the public patronage under the "spoils system."

We condemn it for its systematic levy of black-mail upon the clerks and minor office-holders of the United States, in violation of law, to raise a fund for the corruption of the ballot-box; and we call especially upon the voters of Indiana to vindicate their honor and to erase the stain that was placed upon them by the "Dorseyites" in 1880.

We demand that the present wasteful and unnecessary expenditure of the public money shall be stopped, and that the surplus revenue shall be faithfully applied to the payment of the national debt.

We demand that Federal taxes be reduced to the lowest point consistent with the wants of the Government under an honest and economical administration of its affairs, and that such taxes be so adjusted as to secure an equitable distribution of these burdens.

We demand that there shall be such reforms in the civil service as will again result in the employment in the public service of those only who are honest and capable, and that no assessments or exactions of any kind shall be required of them for political purposes.

We demand protection to our citizens, native and



adopted, at home and abroad, and we denounce and condemn the present Republican Administration for its neglect of duty toward those lately imprisoned as "suspects" in the jails of Ireland by the arbitrary action of the British authorities.

We demand a revision of the present unjust tariff. The Constitution of the United States confers upon Congress the power to establish a tariff for revenue, and, as a just and proper exercise of that power, we favor such an adjustment of its provisions, within the revenue standard, as will promote the industries of the country and the interests of labor, without creating monopolies.

The Democratic party is now, as it has always been, opposed to all sumptuary legislation, and it is especially opposed to the proposed amendment to the Constitution of Indiana known as the prohibitory amendment, and we are in favor of the submission of said proposed amendment, as well as other proposed amendments, to the people according to the provisions of the Constitution for its own amendment, and the people have the right to oppose or favor the adoption of any or all the amendments at all stages of their consideration; and any submission of constitutional amendments to a vote of the people should be at a time and under circumstances most favorable to a full vote, and therefore should be at a general election.

That we freely indorse and approve the laws passed pursuant to the demands of former Democratic Conventions, making provision for the safety and protection of laborers and miners, and providing for the collection of their wages, and are in favor of all other enactments to that end which may be necessary and proper.

The free schools of Indiana are the pride and glory of the State, and we will see to it that they are not poisoned by the breath of sectarianism, nor destroyed by waste and extravagance in their management.

In the relations between capital and labor we favor such policies as will promote harmony between them, and will adequately protect the rights and interests of labor.

We esteem Daniel W. Voorhees as an able and faithful representative of our State in the Senate, and specially commend him for his active sympathy in behalf of the soldier.

The following is the ticket nominated: For Secretary of State, William R. Myers, of Madison; for Auditor of State, James H. Rice, of Floyd County; for Treasurer of State, John J. Cooper, of Marion; for Attorney-General, Francis T. Hord, of Bartholomew; for Clerk of Supreme Court, Simon P. Sheerin, of Cass; for State Superintendent, John W. Holcombe, of Porter; for Judge Supreme Court—First District, William E. Niblack, of Knox; for Judge Supreme Court—Second District, George V. Hawk, of Floyd; for Judge Supreme Court—Fourth District, Allen Zollars, of Allen.

The Republican State Convention, consisting of 1,157 delegates, met in Indianapolis, on the 9th of August, and adopted the following platform:

The Republican party of Indiana, represented in delegate convention, recalls, as an incentive to further exertions for the public welfare, the achievements of the party in restoring the national Union; in overthrowing slavery; in securing to disabled soldiers and to the widows and orphans of those who fell in battle, or died from wounds or diseases contracted in the service of the Union, laws providing for liberal bounties and pensions; in building up an unexampled credit upon the simple foundation of an unchangeable public faith; in reducing the great debt necessarily incurred for the suppression of the rebellion one half, and the

interest on the remainder to so low a rate that the national debt is no longer regarded as a burden; in establishing a currency equal to any in the world, based upon the convertibility of greenbacks and national bank notes into gold or silver at the option of the holders; in increasing the value of agricultural productions and the wages of labor, by building up home markets on the policy of reasonable protection to domestic industries; in exalting the value of our naturalization laws to our foreign-born fellow-citizens, by securing to American naturalization everywhere the full rights of American citizenship; in founding American citizenship upon manhood, and not on complexion, and in declaring that citizenship and the ballot shall ever go hand-in-hand; in maintaining and cherishing as a chief safeguard of liberty our system of free schools, supported by a tax imposed upon all property for the education of all children; and in the submission, from time to time, in the respectful obedience to what has been deemed the popular will, of amendments to the national Constitution and the Constitution of the State. Animated by these recollections, it is resolved—

1. That, reposing trust in the people as the fountain of power, we demand that the pending amendments to the Constitution shall be agreed to and submitted by the next Legislature to the voters of the State for their decision thereon. These amendments were not partisan in their origin, and are not so in character, and should not be made so in voting upon them. Recognizing the fact that the people are divided in sentiment in regard to the propriety of their adoption or rejection, and cherishing the right of private judgment, we favor the submission of these amendments at a special election, so that there may be an intelligent decision thereon, uninfluenced by partisan issues.

2. That we feel it due to the memory of President Garfield to express our sense of the great loss suffered by the nation in his death. We recall with pride the fact that, springing from the humblest conditions in life, Lincoln and Garfield arose, step by step, without any help but the force of their abilities and exertion, to the front rank among Americans, and were chosen by the Republican party to bear its banner in its struggles to maintain the supremacy and glory of the national Union.

3. That lapse of time can not efface from the grateful recollection of the Republican party its memory of the brave soldiers, from whatever section or party ranks they may have come, who offered their lives in support of its policy of restoring and maintaining the union of the States.

4. That a revenue greatly reduced in amount, being all that is now needed to pay the interest on our public debt and the expenses of the Government, economically administered, the time has arrived for such a reduction of taxes and regulation of tariff duties as shall raise no more money than shall be necessary to pay such interest and expenses. We therefore approve of the efforts now making to adjust this reduction, so that no unnecessary burdens upon the consumers of imported articles may exist, and that no injury be inflicted upon our domestic industries, or upon the industrial classes employed therein.

5. That we are gratified to observe that the laws for the protection of miners and securing their wages, under the constant administration of them by Republican mine-inspectors, has done much for the comfort of the workers in mines, and that we hope to see important suggestions of the present inspector for amendments further to promote their comfort adopted by the next Legislature.

6. That the relations between capital and labor should be so adjusted that the rights of laborers shall be fully protected.

7. That the fees of all State and county officers should be so regulated as to give a fair compensation to them, but not so great as to tempt applicants to corrupt methods to obtain the same, or to impose unjust burdens upon the people.



8. That we join with our Irish fellow-citizens in sincere sympathy with the efforts of their brethren in Ireland to break up, by means of just legislation, the large landed estates in that island, and to introduce upon these lands, for the general good of the people, peasant proprietorship. We join with them, also, in the hope that efforts for home-rule in all matters of local concern will prove successful.

9. That it is the duty of Congress to adopt laws to secure a thorough, radical, and complete reform of the civil service, by which the subordinate positions of the government should no longer be considered rewards for their party zeal, which will abolish the evils of patronage, and establish a system making honesty, efficiency, and fidelity the essential qualifications for public position.

10. That the industry, wisdom, and firmness of President Chester A. Arthur meet the cordial indorsement of the Republicans of Indiana.

E. R. Hawn, Secretary of State; Edward H. Wolfe, Auditor of State; Roswell S. Hill, Treasurer of State; D. P. Baldwin, Attorney-General; Jonathan W. Gordon, Clerk of the Supreme Court; and John M. Bloss, Superintendent of Public Instruction, were renominated. For Supreme Judges, Judge William P. Edson, from the First Judicial District; Judge J. G. Berkshire, from the Second Judicial District; and Judge John F. Kibbey, from the Fourth Judicial District, were nominated.

The Greenback State Convention met in the spring, and made the following nominations: For Secretary of State, Hiram Z. Leonard, of Cass County; for Auditor, J. N. Armantrout, of Clinton County; for Treasurer, John Studebaker, of Wells County; for Attorney-General, M. W. Lee, of Muncie County; for Superintendent of Public Instruction, Carleton Bull, of Howard County; for Clerk of the Supreme Court, Jared Saiter, of Clark County.

The Woman's Christian Temperance Union held a session in May, and put forth the following platform:

*Whereas*, By the action of the last Legislature of Indiana amendments have been prepared to the Constitution for the prohibition of the liquor-traffic, and for conferring the right of suffrage upon the women of the State, subject to the concurrence of the next Legislature and a submission thereby to a vote of the people; and, *whereas*, we believe that both of these proposed amendments are of vital necessity to the ends of good government and the interests of humanity: *therefore*—

*Resolved*, That we will put forth our utmost endeavors and use all our talents and influence to secure the election of men to the next Legislature who will submit the question of the adoption of those amendments to the people for decision, and will use our utmost influence, after such submission, to secure a favorable result at the polls.

*Resolved*, That we will not intermit our moral work meanwhile, especially among the children, scattering temperance literature, presenting our cause to religious and educational bodies, holding gospel temperance meetings, helping the fallen, and encouraging the weak and tempted.

*Resolved*, That we cordially and earnestly indorse "Our Herald," and believe that we greatly need, in the peculiar phase of the work in our State, a home organ, and that we will do all we can, by reports of work done and soliciting subscribers, to make it fully what it ought to be, as an agent to put forward our cause to the final adoption of both amendments, which we consider of equal value.

*Resolved*, That as money must supply "the sinews of war," we, as workers of the local unions, pledge ourselves to use every available means to raise money for the State Treasury, and promptly forward it.

*Resolved*, That as we have no wish to add to the already large list of ignorant and thoughtless voters, we recognize the expediency of establishing a department of franchise in our State work, in accordance with the action of the last National Convention, having a superintendent with whom local workers can correspond, and who can supply information and literature bearing on the duties of woman toward the Government, and the relation of the home to the Government, that we may be well qualified to act as becomes intelligent citizens, legislating for the home.

In October the Grand Temperance Council of Indiana issued an address recommending temperance people to support the Republican ticket. On the other hand, those interested in the liquor-traffic organized for the support of the Democratic ticket.

ELECTION RETURNS.—The election resulted in the success of the Democratic ticket. The following is the vote:

For Secretary of State—Hawn, 210,234; Myers, 220,918; Leonard, 13,520; Myers's plurality, 10,684.

For Auditor—Wolfe, 210,540; Rice, 220,639; Armantrout, 13,439; Rice's plurality, 10,099.

For Treasurer—Hill, 210,499; Cooper, 220,378; Studebaker, 13,359; Cooper's plurality, 9,879.

For Supreme Court Clerk—Gordon, 208,802; Sheerin, 220,246; Saiter, 13,284; Sheerin's plurality, 11,444.

For Attorney-General—Baldwin, 210,032; Hord, 221,011; Lee, 13,438; Hord's plurality, 10,979.

For Superintendent of Public Instruction—Bloss, 210,634; Holcombe, 219,177; Bull, 13,264; Holcombe's plurality, 8,543.

Supreme Court Judges—Edson, 212,213; Niblack, 229,550; Niblack's majority, 17,337; —Berkshire, 212,345; Howk, 223,053; Howk's majority, 15,708; —Kibbey, 217,474; Zollars, 222,625; Zollars's majority, 5,151.

The official vote for the congressional candidates is as follows, Republicans being elected in the Sixth, Seventh, Eleventh, and Thirteenth Districts, and Democrats in the other nine:

First District—Heilmann, Republican, 16,399; Kleiner, Democrat, 18,048; Nesbit, National, 512. Kleiner's plurality, 1,649.

Second District—Cobb, Reg. Dem., 16,339; Hostetler, Ind. Dem., 13,288. Cobb's majority, 3,051.

Third District—Walker, Rep., 12,538; Stockslager, Dem., 17,123; Green, Nat., 788. Stockslager's plurality, 4,585.

Fourth District—Holman, Dem., 16,640; Johnson, Rep., 13,146; Thomas, Nat., 250 (?); Holman's plurality, 3,494.

Fifth District—Matson, Dem., 16,851; Wallingford, Nat. Rep., 13,293. Matson's majority, 3,553.

Sixth District—Brown, Rep., 19,562; Pender, Dem., 12,249; Smith, Nat., 789. Brown's plurality, 7,313.

Seventh District—Peelle, Rep., 17,451; English, Dem., 17,364; Medkirk, Nat., 535. Peelle's plurality, 87.

Eighth District—Peirce, Rep., 17,823; Lamb, Dem., 18,110; Copner, Nat., 1,859. Lamb's plurality, 287.

Ninth District—Orth, Rep., 16,482; Ward, Dem., 17,357; Jacks, Nat., 1,114. Ward's plurality, 875.

Tenth District—De Motte, Rep., 16,223; Wood, Dem., 17,237; Moore, Nat., 1,377. Wood's plurality, 1,014.

Eleventh District—Steele, Rep., 19,863; Daily, Dem., 19,539; Thompson, Nat., 1,456. Steele's plurality, 333.

Twelfth District—Glasgow, Rep., 14,223; Lowry, Dem., 16,986; Butler, Nat., 615. Lowry's plurality, 2,763.

Thirteenth District—Calkins, Rep., 17,478; Winterbotham, Dem., 17,087; Shiveley, Nat., 1,935. Calkins's plurality, 391.

The new Legislature consists of 28 Democrats and 22 Republicans in the Senate, and 58 Democrats, 41 Republicans, and 1 Greenbacker, in the House.

Prior to the election there was some discussion whether the whole number or only half of the Senators should be voted for, some prominent Democrats contending that all must be then chosen, but this position seems to have been abandoned.

**PROHIBITORY AMENDMENT.**—Since the election it has been alleged that the Democrats have been seeking for grounds upon which to avoid submitting the prohibitory amendment to the people. The Constitution provides that an amendment must be proposed by one Legis-

lature and set out on the record with the yeas and nays, and referred to the succeeding Legislature. The pending amendments were not set out as required, and it is therefore claimed that they are void, and that there is nothing for the next Legislature to act upon. On the other hand, the Republicans argue that the same defect existed in the case of the Wabash and Erie Canal amendment, that Governor Baker took the ground that it did not invalidate it, and that the amendment was adopted and went into effect. There is also a decision of the Supreme Court of the State upon an appropriation bill, that it is not competent for a court to go beyond the attesting signature of the President of the Senate and the Speaker of the House, and that the bill being properly enrolled and attested, the courts are precluded from attacking the measure collaterally by showing a faulty record.

Another alleged defect, which is not thought to be of serious consequence, is, that the amendments were not expressly "referred" to the next General Assembly.

**INSURANCE.** Statistics relating to the various insurance companies of the United States are reported for the first time by the Federal Government in the census returns for 1880. The year covered by the statistics is that ending December 31, 1879. The chief results for the United States are here given.

**LIFE INSURANCE.**—The number of companies in the United States is 59. The names of the companies, the place of principal office, and the year of beginning business are shown in the following table:

NAME.	Principal office.	Commenced business.
Alabama Gold Life Insurance Company.....	Mobile, Ala.....	1868
Mobile Life Insurance Company.....	Mobile, Ala.....	1871
Pacific Mutual Life Insurance Company.....	Sacramento, Cal.....	1868
Etna Life Insurance Company.....	Hartford, Conn.....	1850
Charter Oak Life Insurance Company.....	Hartford, Conn.....	1850
Connecticut General Life Insurance Company.....	Hartford, Conn.....	1865
Connecticut Mutual Life Insurance Company.....	Hartford, Conn.....	1846
Continental Life Insurance Company of Hartford.....	Hartford, Conn.....	1864
Hartford Life and Annuity Insurance Company.....	Hartford, Conn.....	1867
Phoenix Mutual Life Insurance Company.....	Hartford, Conn.....	1851
Travelers' Insurance Company.....	Hartford, Conn.....	1864
National Life Insurance Company of the United States of America.....	Washington, D. C.....	1868
Cotton States Life Insurance Company.....	Macon, Ga.....	1869
Franklin Life Insurance Company.....	Indianapolis, Ind.....	1866
Equitable Life Insurance Company of Iowa.....	Des Moines, Iowa.....	1867
Southern Mutual Life Insurance Company of Kentucky.....	Louisville, Ky.....	1866
Missouri Valley Life Insurance Company.....	Leavenworth, Kans.....	1867
Louisiana Equitable Life Insurance Company.....	New Orleans, La.....	1863
Union Mutual Life Insurance Company.....	Augusta, Me.....	1849
Maryland Life Insurance Company of Baltimore.....	Baltimore, Md.....	1865
Mutual Life Insurance Company of Baltimore.....	Baltimore, Md.....	1870
Berkshire Life Insurance Company.....	Pittsfield, Mass.....	1851
John Hancock Mutual Life Insurance Company.....	Boston, Mass.....	1862
Massachusetts Mutual Life Insurance Company.....	Springfield, Mass.....	1851
New England Mutual Life Insurance Company.....	Boston, Mass.....	1843
State Mutual Life Assurance Company.....	Worcester, Mass.....	1845
The Michigan Mutual Life Insurance Company.....	Detroit, Mich.....	1867
Covenant Mutual Life Insurance Company of St. Louis.....	St. Louis, Mo.....	1853
German Mutual Life Insurance Company of St. Louis.....	St. Louis, Mo.....	1858
Mutual Benefit Life Insurance Company.....	Newark, N. J.....	1845
Prudential Insurance Company of America.....	Newark, N. J.....	1875
Brooklyn Life Insurance Company.....	New York, N. Y.....	1864
Equitable Life Assurance Society of the United States.....	New York, N. Y.....	1859
Germania Life Insurance Company.....	New York, N. Y.....	1860
Home Life Insurance Company.....	Brooklyn, N. Y.....	1860
Homeopathic Mutual Life Insurance Company.....	New York, N. Y.....	1863



NAME.	Principal office.	Commenced business.
Knickrbocker Life Insurance Company.....	New York, N. Y.....	1853
Manhattan Life Insurance Company.....	New York, N. Y.....	1850
Metropolitan Life Insurance Company.....	New York, N. Y.....	1867
Mutual Life Insurance Company of New York.....	New York, N. Y.....	1848
New York Life Insurance Company.....	New York, N. Y.....	1845
Provident Savings Life Assurance Society.....	New York, N. Y.....	1875
United States Life Insurance Company in the city of New York.....	New York, N. Y.....	1850
Washington Life Insurance Company.....	New York, N. Y.....	1860
Universal Life Insurance Company.....	New York, N. Y.....	1865
Western New York Life Insurance Company.....	Batavia, N. Y.....	1868
North Carolina State Life Insurance Company.....	Raleigh, N. C.....	1873
Toledo Mutual Life Insurance Company.....	Toledo, Ohio.....	1872
Union Central Life Insurance Company.....	Cincinnati, Ohio.....	1867
American Life Insurance Company.....	Philadelphia, Pa.....	1850
Girard Life Insurance, Annuity, and Trust Company of Philadelphia.....	Philadelphia, Pa.....	1845
Penn Mutual Life Insurance Company of Philadelphia.....	Philadelphia, Pa.....	1846
Presbyterian Annuity and Life Insurance Company.....	Philadelphia, Pa.....	1759
Provident Life and Trust Company of Philadelphia.....	Philadelphia, Pa.....	1865
National Life Insurance Company.....	Montpelier, Vt.....	1850
Vermont Life Insurance Company.....	Burlington, Vt.....	1869
Life Insurance Company of Virginia.....	Richmond, Va.....	1871
Piedmont and Arlington Life Insurance Company*.....	Richmond, Va.....	1869
Northwestern Mutual Life Insurance Company.....	Milwaukee, Wis.....	1858

The figures given below are the aggregate statistics for all of these companies:

## CAPITAL STOCK.

Authorized maximum.....	\$15,770,000
Paid up in cash.....	8,634,190
Subscribed, but unpaid.....	864,209

## INCOME.

Ledger assets at beginning of year.....	\$419,868,468
Decrease of capital.....	554,071
Ledger assets at beginning of year as valued at close of year.....	419,284,396
Gross cash premium receipts.....	48,895,558
Premium notes and liens.....	2,618,208
Premiums paid by dividends and by surrendered insurance.....	5,848,639
Cash received for annuities.....	757,635
Gross premium receipts in cash and notes.....	57,615,102
Less paid out for reinsurance.....	166,759
Net premium receipts in cash and notes.....	57,448,352
Interest on mortgage loans.....	14,045,973
Interest and dividends on bonds and stocks owned.....	6,728,356
Interest on premium notes and liens.....	2,045,887
Interest on other debts.....	775,704
Discount on claims paid in advance.....	79,280
Rent of companies' property.....	1,564,643
Profit on bonds, stocks, and real estate sold.....	82,341
Total interest, etc., receipts.....	25,322,092
Miscellaneous receipts.....	618,412
Total income.....	88,388,587

## DISBURSEMENTS.

Gross ledger assets at close of year.....	\$502,673,254
Cash paid for losses.....	23,015,899
Premium notes and liens used in settlement of losses.....	725,524
Cash paid for matured endowments.....	8,939,889
Premium notes and liens used in settlement of matured endowments.....	1,005,969
Gross amount paid for losses and matured endowments.....	38,707,252
Less amount received on reinsurances.....	97,540
Total policy payments, less reinsurances.....	38,609,712
Cash paid to annuitants.....	275,869
Cash paid for surrendered insurance.....	9,906,883
Premium notes or liens on surrenders and lapses.....	2,626,949
Premiums paid by surrender of other insurance.....	2,459,999
Cash dividends to policy-holders.....	12,229,588
Dividends to policy-holders by cancellation of their notes or liens.....	1,940,039
Total returned to policy-holders in cash, and by cancellation of their cash indebtedness.....	62,439,810
To stockholders, for interest or dividends.....	468,393
For agents' commissions.....	3,871,524
For salaries, traveling expenses, etc., of managers and agents.....	912,668
For medical examination fees.....	297,893
For compensation of officers and office employes.....	2,198,755
For taxes and licenses.....	1,467,870

For rent.....	821,473
For commission of commissions.....	405,749
For advertising.....	416,142
Miscellaneous disbursements.....	8,194,893
Total disbursements.....	76,089,188

## ASSETS.

Net ledger assets at close of year.....	\$426,584,115
Cost value of real estate.....	63,820,691
Loans on real-estate security.....	184,758,800
Loans on bonds, stocks, etc.....	14,107,158
Loans on companies' own policies.....	568,067
Premium notes or liens.....	80,527,151
Cost value of bonds and stocks owned.....	115,285,674
Cash on hand and in bank.....	14,792,121
Bills receivable.....	841,777
Due from agents and miscellaneous.....	1,893,173
Total ledger assets by inventory.....	426,584,115
Depreciation of assets from cost value to market value.....	3,488,267
Total ledger assets less depreciation.....	423,100,849
Accrued interest on bonds, mortgages, etc.....	7,262,512
Accrued interest on premium notes and liens.....	1,232,170
Accrued rents.....	211,084
Market value of real estate over cost.....	836,083
Market value of bonds and stocks over cost.....	5,447,085
Deducted by company on account of loading.....	1,059,447
Uncollected and deferred premiums, less deduction on account of loading.....	4,466,273
Miscellaneous.....	166,154
Total assets.....	442,272,471

## LIABILITIES.

American 44 per cent reserve, December 31, 1879.....	\$355,517,487
Reserve for reinsurances.....	527,411
Reserve after deduction of preceding.....	354,990,026
Premium obligations in excess of net reserves.....	89,927
Unpaid claims for death-losses due.....	734,211
Unpaid claims for matured endowments.....	839,769
Claims for death-losses not due or in process of adjustment.....	4,501,570
Policy claims resisted.....	1,200,223
Total policy claims.....	6,509,701
Unpaid dividends due policy-holders.....	1,908,694
Unpaid dividends due stockholders.....	19,983
Unpaid taxes.....	27,739
Unpaid salaries, rents, etc.....	18,571
Borrowed money.....	472,185
All other liabilities.....	2,322,050
Liabilities as to policy-holders.....	865,668,976
Excess of assets over liabilities as to policy-holders.....	76,608,494

The number of policies written in 1879 was 122,868; aggregate amount, \$187,049,113; number terminated, 104,165; amount, \$210,336,483; number in force December 31, 1879, 725,560; amount, \$1,560,756,437.

FIRE AND MARINE INSURANCE.—The total number of fire and marine insurance companies in the United States in 1879, as returned

\* Receiver appointed December 23, 1880.

by the census of 1880, was 1,647. Of these 1,462 were doing a fire business only, 140 a fire marine business, and 45 a marine business only. Of the whole number, 424 were doing business with a joint-stock capital, and 10 with a guarantee capital; 235 were doing a general business on the mutual plan, and 978 were doing a farm or local business on the mutual plan. The aggregate amount of joint-stock or guaranteed capital was: authorized, \$144,939,200; paid up in cash, \$99,090,788; paid up in notes, \$2,691,051. The aggregate assets of all companies were returned as follow:

Market value of real estate owned, less all encumbrances.....	\$18,477,914
Amounts loaned on bond and mortgage (first liens).....	44,859,286
Market value of United States bonds and securities actually owned.....	75,035,442
Market value of State, county, city, and town bonds and securities actually owned.....	21,020,352
Market value of all other bonds, stock, and securities actually owned.....	36,484,707
Amounts loaned on collateral securities.....	11,188,471
Amounts of cash or available assets not previously specified.....	89,761,595
Total amounts of cash or available assets.....	247,184,203
Contingent assets.....	645,137,843
Total cash or available and contingent assets (ledger assets).....	\$892,271,556

The aggregate liabilities of all companies were as follow:

Amount due for unpaid losses.....	\$10,358,906
Miscellaneous cash liabilities.....	12,525,268
Total cash liabilities.....	22,884,174
Contingent liabilities.....	43,297,127
Total cash and contingent liabilities (liabilities as to policy-holders).....	71,181,301
Excess of cash or available and contingent assets over cash and contingent liabilities (policy-holders' surplus).....	821,090,225
Capital and scrip liabilities.....	757,451,984
Excess of cash or available and contingent assets over cash, contingent, capital and scrip liabilities (stockholders' surplus).....	69,639,959
Excess of all assets over all liabilities (net assets).....	\$69,387,382

The aggregate income and expenditures of all companies were as follow:

#### CASH INCOME.

Net amount of fire premiums and assessments received in cash.....	\$65,763,600
Net amount of marine and inland premiums received in cash.....	16,087,163
Total amount of premiums and assessments received in cash.....	81,850,763
Cash received from investments.....	11,619,592
Cash received from increased capital and calls on capital.....	788,022
Cash received from miscellaneous sources.....	1,873,602
Aggregate cash income and receipts during the year.....	95,566,979

#### CASH EXPENDITURES.

Net amount paid in cash for fire-losses.....	\$87,887,240
Net amount paid in cash for marine and inland losses.....	10,551,745
Total paid in cash for losses.....	48,438,985
Amount of stockholders' dividends paid in cash and (mutual companies) cash returned as profits or surplus.....	14,283,118
Amount paid in cash on account of expense.....	26,321,948
Miscellaneous cash expenditures.....	1,655,188
Aggregate cash expenditures during the year.....	90,699,284

The risks of fire, fire-marine, and marine companies written during 1879, and in force at the end of the year, were as follow:

Fire-risks written.....	\$8,189,453,076
Marine and inland risks written.....	1,975,687,446
Premiums charged on marine and inland risks written.....	18,389,073

Total amount of all risks written.....	10,115,140,522
Losses incurred during 1879.....	48,128,564
Fire risks in force December 31, 1879.....	10,000,528,643
Marine and inland risks in force.....	258,524,213
Total amount of risks in force.....	10,284,652,856

The following summary shows the ratios of the business of fire, fire-marine, and marine companies for the year 1879:

#### RATIOS OF LOSSES.

Fire-losses paid to fire premiums and assessments received in cash.....	0.5736
Marine and inland losses paid to marine and inland premiums received in cash.....	0.6580
Total losses paid to total premiums and assessments received in cash.....	0.5901
Total losses paid to total cash income.....	0.5058
Total losses paid to total cash expenditures.....	0.5341
Fire-losses paid to fire-risks written.....	0.0047
Marine and inland losses paid to marine and inland risks written.....	0.0053

#### RATIOS OF DIVIDENDS.

Dividends paid to paid-up capital stock.....	0.1605
Dividends paid to ledger assets.....	0.0404
Dividends paid to total cash income.....	0.1650
Dividends paid to total cash expenditures.....	0.1904
Dividends paid to income from investments.....	1.8807

#### RATIOS OF EXPENSE.

Expenditures on account of expense to cash received from premiums and assessments.....	0.8090
Expenditures on account of expense to total cash income.....	0.2746
Expenditures on account of expense to total cash expenditures.....	0.2902

#### RATIOS TO CASH INCOME.

Cash received from premiums and assessments to total cash income.....	0.8562
Income from investments to total cash income.....	0.1212
Total cash expenditures to total cash income.....	0.9461

#### RATIOS TO LEDGER ASSETS.\*

Paid-up capital stock to ledger assets.....	0.4876
Cash and contingent liabilities to ledger assets.....	0.0798
Cash, contingent, and capital liabilities to ledger assets.....	0.9156
Cash, contingent capital, and scrip liabilities to ledger assets.....	0.9287

The ratio of liabilities as to policy-holders to cash or available assets was 0.2880. The ratio of net assets to risks in force was 0.0845; amount of risks in force to each one dollar of net assets, \$11.83.

IOWA. STATE GOVERNMENT.—The State officers during the year were: Governor, Buren R. Sherman, Republican; Lieutenant-Governor, O. H. Manning; Secretary of State, John A. T. Hull; Treasurer, E. H. Conger; Auditor, William V. Lucas; Attorney-General, Smith McPherson; Adjutant-General, W. L. Alexander; Superintendent of Public Instruction, John W. Akers; Register of Land-Office, James K. Powers; Railroad Commissioners, A. R. Anderson, Peter A. Day, and M. C. Woodruff; State Librarian, Mrs. S. B. Maxwell. Judiciary—Supreme Court: Chief-Justice, William H. Seevers; Associate Justices, Austin Adams, Joseph M. Beck, James G. Day, and James H. Rothrock.

LEGISLATURE.—The Legislature met on the 8th of January, and remained in session until the 17th of March. On the 12th of January the Governor and Lieutenant-Governor were inaugurated. On the 17th United States Sena-

\* I. e., total cash or available and contingent assets.



tors were elected for the full term of six years, commencing March 4, 1883, and for the term ending on that day, to fill the vacancy occasioned by the resignation of Samuel J. Kirkwood, appointed Secretary of the Interior in President Garfield's Cabinet. For the full term James F. Wilson, Republican, was chosen, receiving thirty-five votes against three in the Senate, and fifty-nine against twenty-four in the House. For the vacancy, James W. McDill was chosen, receiving thirty-six votes against three in the Senate, and sixty-five against twenty-four in the House.

The following are the most important of the measures passed at this session:

Acts reapportioning the State for members of the Senate and House.

An act to authorize incorporated cities and towns to procure and donate to railroad companies sites for depots, machine-shops, and other buildings.

An act to increase the number of circuit judges in each circuit of this State containing a city having a population in excess of 22,300, and to provide for the election of said judges. Provides for the election of an additional circuit judge in all circuits situated as above, at the general election in 1882, said judges to hold their offices four years from January, 1883.

An act to provide for the levy of a half-mill State tax for the years 1882 and 1883, to reimburse the general revenue fund of the State for money paid on account of war debts, and for the completion of the new Capitol, and other purposes. Provides that the State tax shall be two and a half mills for 1882 and 1883.

An act providing for the cancellation of taxes voted to aid in the construction of railroads. Provides that where aid has been voted for the construction of a railroad, and the company neglects or refuses to receive such taxes for a period of six months, the company shall forfeit all its right to such aid or tax. The Board of Supervisors shall give such railroad companies due notice before such cancellation can be made.

An act to amend chapter 114, laws of Sixteenth General Assembly, in relation to the submission of amendments to the Constitution of the State to a vote of the people. This act authorizes the submission of amendments to the Constitution to a vote of the people at a *special* election, as the General Assembly may provide.

An act to resume all the lands and rights conferred upon the Sioux City and St. Paul Railroad Company, by or under an act of Congress, approved May 12, A. D. 1864, to lands not heretofore owned by said company.

By act of April 3, 1866, the State of Iowa granted to the Sioux City and St. Paul Railroad Company certain lands; and by the terms of said grant, if said road was not completed within ten years from the date of acceptance, and the railroad accepted said grant on the 20th day of September, 1866, and has failed to

complete said road, therefore the State resumes the lands.

An act granting additional powers to cities organized under the general incorporation laws of the State; provides for taxing itinerant doctors and junk-dealers; prohibits second-hand dealers purchasing from minors without consent of parents; requiring all buildings to be numbered; to change the channels of water-courses; to control the construction of chimneys, ovens, stove-pipes, and, in general, to have supervision of all chimneys, boilers, and heating apparatus of whatsoever kind or nature, as well as deposits of ashes, lights in stables, shops, and factories, to provide for the inspection of all steam-boilers; in short, to have full and complete charge of all things which will promote the safety and health of the inhabitants.

An act to amend chapter 110, acts of Thirteenth General Assembly, and chapter 35, Acts of Fourteenth General Assembly, and making an additional appropriation for completing the Capitol building. This act appropriates the sum of \$525,000, in order to complete the new Capitol, to be drawn as follows: \$75,000 to be drawn in the year 1882; \$275,000 in the year 1883; \$175,000 in the year 1884. It provides for the completion of the Senate-chamber, hall of House of Representatives, library-room, and as much more as may be found practicable.

An act to authorize cities of the first and second class to change their corporate names, and to prescribe the manner in which such change may be made. This act authorizes the council of any city of the first or second class, or of any incorporated town, to change its name by resolution of said council, said resolution to be ratified by a vote of the qualified electors, provided that the name shall not be the same as that of any other city or town in the State.

An act to repeal section 487 of the Code, and to enact a substitute, in relation to poll-tax. This act repeals section 487 of the Code, and re-enacts the greater portion thereof, changing the age for liability to poll-tax from fifty to forty-five years, and increases the penalty for each day's failure to attend and perform labor from two to three dollars, and makes all property and wages of the defendant liable to execution in payment of poll-tax, judgment to be obtained before the mayor of a corporation or justice of the peace of a township, the money so collected to be expended upon the streets of the corporation.

An act to amend chapter 143 of the acts of Sixteenth General Assembly, entitled an act to provide for establishing superior courts in cities of a certain grade. This act repeals the words 5,000, and inserts 8,000; changes two-thirds into a majority; provides for change of name to circuit court; judgments to be made liens on real estate by filing transcripts; does not affect any actions already commenced in any superior court.

An act to repeal part of section 521, title 4,

chapter 10, of the Code, and enact a substitute therefor in relation to the election of aldermen in cities of the first class. Provides for the election of aldermen for each ward, and two at large, in the year 1882, and arranges for the term of office of one alderman to expire each year.

An act to legalize the sale and transfer by the St. Paul and Sioux City Railroad Company of its railroads in Iowa to the Chicago, St. Paul, Minneapolis, and Omaha Railway Company, and to legalize the issue of its stock and bonds thereon by the last-named company.

An act to submit to a vote of the people the proposed amendment to the Constitution prohibiting the manufacture and sale of intoxicating liquors as a beverage within this State, fixing Tuesday, June 27, 1882, as the date upon which to submit said proposed amendment to a vote of the people.

An act was also passed to divide the State into eleven congressional districts. These districts are constituted as follow:

First District: the counties of Lee, Des Moines, Henry, Van Buren, Jefferson, Washington, and Louisa.

Second District: the counties of Jones, Jackson, Clinton, Cedar, Scott, and Muscatine.

Third District: the counties of Dubuque, Delaware, Buchanan, Black Hawk, Bremer, Butler, and Grundy.

Fourth District: the counties of Clayton, Fayette, Winneshiek, Allamakee, Howard, Mitchell, Floyd, and Chickasaw.

Fifth District: the counties of Marshall, Tama, Benton, Linn, Johnson, and Iowa.

Sixth District: the counties of Jasper, Poweshiek, Mahaska, Monroe, Wapello, Keokuk, and Davis.

Seventh District: the counties of Guthrie, Dallas, Polk, Adair, Madison, Warren, and Marion.

Eighth District: the counties of Clarke, Lucas, Ringgold, Decatur, Wayne, Appanoose, Union, Adams, Page, and Taylor.

Ninth District: the counties of Pottawattamie, Cass, Mills, Audubon, Crawford, Montgomery, Shelby, Fremont, and Harrison.

Tenth District: the counties of Boone, Story, Hardin, Hamilton, Webster, Franklin, Wright, Humboldt, Hancock, Cerro Gordo, Worth, Winnebago, and Kossuth.

Eleventh District: the counties of Lyon, Osceola, Dickinson, Emmet, Sioux, O'Brien, Clay, Palo Alto, Plymouth, Cherokee, Buena Vista, Pocahontas, Woodbury, Ida, Sac, Calhoun, Monona, Carroll, and Greene.

The prohibitory amendment to the Constitution was agreed to.

The following joint resolutions, among others, were adopted:

Joint resolution, proposing to amend section 1, of Article II, of the Constitution of Iowa, by striking therefrom the word "male" (female suffrage).

Joint resolution, proposing amendments to the constitution and providing for their reference and publication. This resolution proposes four separate amend-

ments to the Constitution, to wit: 1. To hold the general election for State, district, county, and township officers on the Tuesday next after the first Monday in November. 2. That at any regular session of the General Assembly the State may be divided into the necessary judicial districts for district court purposes, or the said districts may be reorganized and the number of the districts and the judges of said courts increased or diminished, but no reorganization of the districts or diminution of the judges shall have the effect of removing a judge from office. 3. The grand jury may consist of any number of members, not less than five nor more than fifteen, as the General Assembly may by law provide, or the General Assembly may provide for holding persons to answer for any criminal offense without the intervention of a grand jury. 4. That section 13, of Article V, of the Constitution be stricken therefrom and the following adopted as such section: "The qualified electors of each county shall, at the general election in the year 1886 and every two years thereafter, elect a county attorney, who shall be a resident of the county for which he is elected, and who shall hold his office for two years, and until his successor is elected and qualified."

By a congressional act the State was divided into two Federal districts for judicial purposes. The Southern District will have court at Des Moines, Council Bluffs, and Keokuk, and the Northern at Dubuque, Fort Dodge, and Sioux City.

**PROHIBITORY AMENDMENT.**—The temperance campaign was opened early. On the 26th of January a State Convention was held in Des Moines, with a view to influencing legislative action, in which sixty-five of the ninety-nine counties were represented by 200 delegates. The following preamble and resolutions were adopted:

Rejoicing in the patriotic recognition of the fundamental principles of republicanism and democracy as expressed by the Legislature of Iowa in 1880, by their action proposing to submit to a vote of the people the pending prohibitory amendment, and relying upon the fidelity of the majority in the present General Assembly to both these principles, and their pledges already made, we hail the near approach of the day of decisive battle for the happiness, prosperity, and future glory of Iowa, and do inscribe upon our banners the constitutional amendment passed by the Eighteenth General Assembly, and based upon Article I, section 2, of the Constitution of the State of Iowa, which declares that "all political power is inherent in the people. Government is instituted for the protection, security, and benefit of the people, and they have the right at all times to alter or reform the same, whenever the public good may require it."

We, the representatives of the temperance sentiment of the people, do therefore make the following declaration of principles and purposes:

*Resolved*, That the saloons and other places where intoxicating liquors are sold as a beverage, now existing under the law and tolerated in this State, add nothing to the health, peace, prosperity, and happiness of the people, but on the contrary are the chief source of crime, lawlessness, poverty, and wretchedness, and their effectual suppression can only be effected by the adoption of the principle and policy of constitutional prohibition.

*Resolved*, That we ask the Legislature to provide for the holding of said special election on the first Saturday of September, 1882, being the 2d day of said month.

*Resolved*, That the selling of intoxicating liquors as a beverage by many hundreds of drug-stores, under the cover and protection of the pharmacy laws of Iowa, is an infamy more base than ordinary saloon-



keeping, because it seeks to hide its piratical hypocrisy under the guise of a legitimate business. And we would encourage our Representatives in the present General Assembly to push forward the proposed amendment to the pharmacy laws, so as to correct the abuses now existing, and to prevent the druggist from selling intoxicating liquors except for strictly medicinal purposes, as contemplated by the proposed constitutional amendment.

*Resolved*, That we condemn the bill recently introduced into the national Senate, proposing to convert the revenues accruing from the traffic in intoxicants into a fund for the education of our youth. We join the virtue-loving legions of the nation in most emphatic denunciation of any attempt to ally education, which involves our most cherished hopes for the nation's future prosperity, with drunkenness and drunkard-making, the notorious, wanton, and profit-mother of the nation's crimes, impoverishments, and woes; and we earnestly request our Senators and Representatives in the council of the nation to voice the sentiment of Iowa; that the consummation of such an illogical and unnatural alliance would impeach the virtue and insult the intelligence of the American people.

*Resolved*, That while we commend the papers of our State directly devoted to the cause of temperance, to the earnest support of all, we hail with satisfaction the action of a large portion of the political press of the State who are ranging themselves on the side of prohibition and good government in this contest, and commend all such papers to the hearty and liberal moral and pecuniary support of all the people, and especially the merchants and tradesmen whose business is invariably robbed by the expenditure of money in saloons that ought to be expended for the necessities of life.

*Resolved*, That we again hail with gladness upon this floor our invaluable and invincible allies to this great struggle—the representatives of the Woman's Christian Temperance Union of Iowa, and other lady-workers for the promotion of the public good. The work already accomplished by them is above all praise. Deprecating any attempt to impede their work, or to impugn the motives or actions of any member of this noble army of Christian workers, we bid them Godspeed and pledge them every possible assistance, only regretting that they are powerless to help us at that one point where, could they only strike one blow, it would exterminate this monster infamy at once and forever.

*Resolved*, That we do now appeal to the intelligent and virtue-loving people of the State of Iowa, and in particular to the parents of the children soon to come into the inheritance we are preparing for them by our institutions and our laws, to improve this golden opportunity to transmit to the generations following an inheritance of indemnity against drunkenness and consequent crime which shall be to them an occasion for thanksgiving and everlasting rejoicing. To the accomplishment of this noble and patriotic endeavor, let every Christian, every parent who loves his child, every patriot, and every lover of his fellow-beings, unite in one persistent and tireless struggle until the legal prohibition of the traffic in intoxicating beverages is finally and fully assured.

*Resolved*, By this largest State Temperance Convention ever held in Iowa, that all the churches in the State, of whatever name, both Catholic and Protestant, be hereby most respectfully and earnestly urged to devote one Sunday evening in each month to union and other meetings especially in the interest of temperance and the success of the prohibition movement now going on among the people.

The twenty-third annual meeting of the Iowa brewers was held in Des Moines on the 12th of April. This meeting, which was attended by over one hundred delegates from every city in the State and a number of towns,

issued an address to the people of the State against the proposed amendment, and adopted the following resolutions:

*Resolved*, That the proposed prohibitory amendment to the Constitution of this State, which now threatens the complete destruction of the brewing interest, so entirely overshadows all other subjects as to demand the undivided consideration of this association.

*Resolved*, That we appeal to the candid, thinking, and intelligent voters of Iowa to do us the simple justice of looking into and investigating the merits of our objections to this measure before voting, among which objections are the following:

1. The only practical effects of the said proposed amendment will be to substitute distilled liquors in the place of beer as a beverage.

2. Beer is comparatively a harmless beverage, containing only about 4 per cent of alcohol, and experience has shown that its use tends materially to diminish the amount of distilled liquors required, and thereby decreases drunkenness and promotes temperance.

3. Experience has taught us, beyond all controversy, that men will use *some stimulating drink* as a beverage. Since men have any knowledge of history such has been the case. If we are to admit that anything can be settled by the uniform concurrence of ages, then this fact must be considered as established. It necessarily follows that the use of all stimulating beverages can not be prohibited, and that the good of the people is best promoted by encouraging the use of the milder beverages instead of the stronger.

4. In the year 1858 the Legislature of this State voluntarily enacted that henceforth in Iowa the making and vending of beer should be a valid and legal business. This necessarily implied that property invested in that business should be recognized and protected the same as any other property. It has been so recognized, has paid its full share of taxes, and borne its full part of the burdens of government. We, having confidence in the honor and good faith of the State, have invested all our means in the business, and now it is proposed to change all this, and enact that our said business shall be unlawful, and the property invested therein a nuisance; and that no compensation shall be made to us for our property thus destroyed. We insist that this is unjust, oppressive, and unworthy of a free government.

5. The said proposed amendment to the Constitution is in no sense a constitutional law, but is in the nature of a police regulation, over which the Legislature should have full and immediate control. It does not belong to the fundamental law of the State.

6. No State has had such a constitutional provision, but it has been found to increase drunkenness, pauperism, and crime, and consequently taxation, and in every such State it has been repealed, or steps are now being taken to that end, and a license law enacted.

7. The said amendment, if adopted, will destroy not less than four million dollars of permanent property, will deprive of employment a very large number of laborers, who must seek work in other avocations already supplied; and will largely increase deception, hypocrisy, and contempt of law.

8. Said proposed amendment is of doubtful meaning, and must necessarily produce strife and litigation; and in voting for it no one can know with a certainty what he is voting to make a part of our constitutional law.

*Resolved*, That we will use all honorable means to defeat said proposed amendment at the polls, and, if we are unsuccessful, will resist its unjust and oppressive provisions by every method known to law.

*Resolved*, That we will never knowingly support for any office or place of trust any one who shall vote for this proposed outrage upon our property and rights.



*Resolved*, That the recent elections in Ohio, which followed the passage of the Pond bill, is only a forerunner of what will occur in this State if the Republican party adheres to its policy of favoring fanaticism as against the liberal element.

At the election on the 27th of June, 1855, 436 votes were cast for the amendment and 125,677 against it—majority for the amendment, 29,759. Of the counties, 74 gave majorities for it, 24 against it, and one county (Van Buren) gave a tie-vote. The amendment thus ratified reads as follows:

No person shall manufacture for sale, sell, or keep for sale as a beverage any intoxicating liquors whatever, including ale, wine, and beer. The General Assembly shall, by law prescribe regulations for the enforcement of the prohibition herein contained, and shall thereby provide suitable penalties for violation of the provisions thereof.

Discussion immediately arose as to the time when the amendment went into operation, and as to the necessity of legislation to enforce its provisions. A State Convention of the friends of the amendment was held in Des Moines on the 27th of July, to which a committee, previously appointed, reported that the amendment was in force from the day of its adoption (June 27th), that the manufacture and sale of intoxicating liquors, including ale, wine, and beer, became illegal from that time, and that contracts relating thereto could not be enforced; but that existing laws affixed no penalties to the manufacture and sale of ale, beer, and wine from native fruits, and that further legislation in that behalf was necessary. This convention adopted the following resolutions:

*Resolved*, That it is with feelings of profound gratitude we recognize the hand of God in the victory achieved by the adoption of the prohibitory amendment to the Constitution of Iowa.

*And, whereas*, The existing laws of the State are now uncertain and inadequate to secure the due enforcement of said amendment; therefore—

*Resolved*, That it is the sense of this convention that an extra session of the General Assembly should be called at the earliest practicable day to enact such laws, with suitable penalties, as will certainly secure the speedy enforcement of said amendment.

*Resolved*, That the general officers of the State Prohibitory Amendment Association of Iowa be charged with the duty of conferring with the Governor of this State, and secure the calling of an extra session of the General Assembly, as contemplated by the above resolution.

*Resolved*, That the thanks of this convention are due, and are hereby tendered, to the Legal Committee for their very able and exhaustive reports, which they have submitted to this convention, and we recommend that said reports be published in the proceedings of this convention for the information of the public.

*Resolved*, That the Legal Committee above named be appointed a committee on legislation, to represent the temperance people of Iowa before the next term of the General Assembly.

*Resolved*, That said committee be instructed to present to the General Assembly, also, the necessity of more stringent penalties than have heretofore existed, for the certain suppression of intemperance within the State.

*Resolved*, That we express to the friends of temperance in other States our sincere appreciation of their great interest in our recent conflict, and their often expressed congratulations on the grand result.

*Resolved*, That we are profoundly thankful to those

members of the press, both within and without the State, who rendered aid to the temperance cause in the advocacy of the constitutional amendment.

*Resolved*, That we appreciate the careful and efficient work of the State Central Committee in their conduct of the campaign, and hereby express to them our sincere thanks for the same.

*Resolved*, That while we rejoice in present success, and realize in some sense its magnitude, we are profoundly impressed that, to conserve these results, and to increase their beneficent influence, we will in no measure abate our efforts along the old lines of temperance work. We will still educate the children, circulate temperance literature, offer the total-abstinence pledge, and give succor and aid to the victims of strong drink. Thus shall the union of legal and moral suasion secure the absolute banishment of the evils of intemperance throughout the Commonwealth of Iowa.

On the 10th of October the Woman's Christian Temperance Union held a State Convention in Des Moines, which resolved to carry on the work by efforts to enforce the amendment by educational work among the young, and by enlightening public sentiment. It also pronounced in favor of female suffrage, against the use of tobacco, and in favor of a special session of the Legislature. The Governor, however, did not see fit to call a special session. In December the case of Koehler and Lange *vs.* Hill, involving the question of the legal adoption of the prohibitory amendment, was argued in the Supreme Court. This case arose in Davenport, the plaintiffs suing for the value of beer sold to the defendant, who defended on the ground that such sale was illegal under the amendment. The chief contention of the plaintiffs was that the amendment had never been legally adopted, having passed the Senate in one form and the House in another. The court upheld the claim of the plaintiffs, and declared the amendment void. (For details, see "Annual Cyclopædia" for 1883.)

**RAILROADS.**—The report of the Railroad Commissioners for the year ending June 30, 1882, shows that 911 miles were added during that period.

The total number of miles of railroad in Iowa, reported by the various companies to the board, is 6,337 $\frac{43}{100}$  miles. The commissioners' estimate of the stock of these roads representing the parts of them in Iowa, added to the stock of the roads entirely in Iowa, amounts to \$121,160,084.81, or \$19,117.54 per mile. The total number of stockholders in the State is returned at 734; the total amount of stock reported as owned by persons living in the State is \$2,096,341.41.

The total debt of the roads in Iowa, as reported and estimated by the commissioners, is \$118,657,183.16, or \$18,628.40 per mile. Of this amount \$112,637,966.05 is funded debt—\$5,419,217.11 is unfunded or floating debt.

The stock and debt of the roads in Iowa amount to \$239,217,267.97, or \$34,745.94 per mile.

The report says:

It is difficult to arrive at the cost of the Iowa roads, as many of them came into the hands of the present



holders by purchase at foreclosure, consolidation, or through the medium of construction companies; the amount reported is \$215,979,324.81, or \$23,237,943.16 less than the reported stock and bonds. It is hardly probable that the commissioners will ever be able to arrive at more than an approximation of the cost of the roads.

The entire earnings for the roads in Iowa are:

Passenger, mail, and express.....	\$8,646,470 83
Freight and miscellaneous.....	23,377,495 20
Total earnings for the year ending June 30, 1882.....	32,023,966 03
Total earnings for the year ending June 30, 1881.....	28,452,181 91
Increase of earnings over previous year.....	3,571,774 12
The total operating expenses returned for the Iowa roads for the year 1882 were.....	20,512,393 05
Total operating expenses for 1881.....	10,788,404 80
Excess of operating expenses over previous year.....	\$3,728,988 66
Excess of earnings over previous year.....	3,571,774 12
Making the net earnings less than previous year.....	\$152,214 54

The mileage was increased 911 miles, but the net earnings show but a slight increase for so large an increased mileage, the mileage being much greater than any year since the establishment of the board. The operating expenses per mile of road were \$3,552.64.

The earnings for these roads for the 11,739.59 miles reported in 1880 were \$64,433,179.53, or \$5,491.23 per mile; the operating expenses for the same year were \$35,624,124.79, or \$3,036.51 per mile. The earnings for the 14,109.37 miles reported in 1881 were \$76,530,450.99, or \$5,083.73 per mile; the operating expenses were \$46,043,845.22, or \$3,346.87 per mile. The earnings for the 16,544.46 miles reported in 1882 were \$92,757,206.22, or \$5,606.66 per mile; the operating expenses were \$53,776,474.53, or \$3,552.64 per mile.

Forty-nine per cent of the entire roads of the State, exclusive of sidings, is steel rail. For the year 1881 there was reported 40 per cent; for the year 1880, 32 per cent; for the year 1879, 27½ per cent; for the year 1878, 22 per cent. This indicates, what is the fact, that wherever the traffic is heavy, steel rails have been put down. The percentage of steel to iron rails will not increase as rapidly in the future as it has in the last four years.

The board finds that the average rate of freight per ton per mile varies from 9 cents on the Crooked Creek road; 4.24 on the Burlington and Northwestern; 3.08 on the Des Moines and Fort Dodge, to 1.60 on the Chicago, Milwaukee and St. Paul; 1.47 on the Northwestern; 1.24 on the Rock Island; and .96 on the Wabash. The rates are a little higher than last year.

The total number of persons regularly employed in operating the roads of the State is 28,397, the amount paid them for their services is \$14,071,612.54, or two and one half millions more than the earnings of the roads of the State above operating expenses and the taxes.

During the year 165 persons were killed; of these 7 were passengers, 89 employes, and 69

others: 5 by derailment, 2 by collisions, 4 caught in frogs, 16 coupling cars, 31 falling from train, 19 getting on and off trains, 4 at highway crossings, 41 from miscellaneous causes, 10 stealing rides, 21 while intoxicated, and 33 while trespassing on track. Of this number, 3 were reported as suicides.

There were 635 persons injured during the year; 61 were passengers, 502 were employes, and 72 others: by derailment 59, collisions 37, caught in frogs 4, coupling cars 182, falling from trains 57, getting on and off trains 56, at highway crossings 10, miscellaneous 192, overhead obstructions 6, stealing rides 8, trespassing on track 24.

The report states that one great source of accident, resulting in a very large percentage of injury and death to the railroad employe, is the present method of coupling cars. While we believe the theory is, and most of the time-tables require, the use of the coupling-hook, in practice men go between the cars, and if for any cause the dead-woods of the different cars fail to meet, they are crushed. Others are caught in frogs, the car-wheel catching them before the foot can be removed. In the report for this year, 4 employes were killed, being caught in frogs, and 16 in coupling cars; 4 were injured, being caught in frogs, and 82 in coupling cars.

The following is a classified statement of the tonnage carried during the year:

ARTICLES.	Tons.	Per cent.
Grain.....	2,471,986	35.89
Flour.....	199,405	2.04
Provisions.....	115,186	1.18
Animals.....	980,518	10.08
Other agricultural products.....	160,608	1.65
Lumber and forest products.....	1,551,515	15.87
Coal.....	1,767,044	18.07
Lime, cement, etc.....	108,265	1.11
Salt.....	110,646	1.13
Oil, petroleum, etc.....	81,458	.83
Iron and castings.....	209,707	1.43
Stone and brick.....	207,906	2.13
Manufactures.....	109,862	1.12
Merchandise and other articles not enumerated.....	1,820,215	18.62
Total.....	9,777,415	100.00

Add to this amount an estimated tonnage for the Chicago, Burlington, and Kansas City; the Kansas City, St. Joseph, and Council Bluffs; the St. Paul, Minneapolis, and Omaha; the Minneapolis and St. Louis; Keokuk and Northwestern; the Wabash, St. Louis, and Pacific; and the Fort Madison and Northwestern roads (whose officers were unable to separate their Iowa tonnage), 1,198,427 tons, and we have a total of 10,975,642; deducting from this the freight twice reported, that is, the freight delivered to and received from the smaller roads by the trunk lines (as estimated by the commissioners), 380,688 tons, and we have the Iowa tonnage as 10,595,184.

RAILWAY LAND GRANTS.—The net amount realized from congressional land grants by the railroad companies to date of report:

The Chicago, Burlington, and Quincy .....	\$3,164,243 66
The Chicago, Milwaukee, and St. Paul.....	1,129,669 00
The Chicago, Rock Island, and Pacific.....	2,597,308 61
The Iowa Falls and Sioux City .....	2,229,829 24
The Des Moines and Fort Dodge.....	14,933 43
The Cedar Rapids and Missouri River (956- 597.40 acres).....	63,961 60
The Sioux City and Pacific.....	200,000 00
The Sioux City and St. Paul (report of 1878) ..	286,919 43
Total.....	\$10,186,879 02

**PARTY CONVENTIONS.**—The Republican State Convention met in Des Moines, on the 2d of August, and renominated J. A. T. Hull, for Secretary of State; E. H. Conger, for Treasurer; Smith McPherson, for Attorney-General; and William H. SeEVERS, for Judge of Supreme Court. J. L. Brown, of Lucas County, was nominated for Auditor; G. B. Pray, of Hamilton County, for Clerk of the Supreme Court, and E. C. Ebersole, of Tama County, for Supreme Court Reporter. The following is the platform adopted:

The Republican party of Iowa, reaffirming its support of the national platform of the party of 1880, and its own declaration in the past, submits the following as its platform for the present year:

1. In reaffirming the platform of 1880, and insisting upon its enforcement in its relation to the several affairs of the nation, the State, and the Territories, in order that sound policies shall prevail in the nation, and ample protection be afforded to its citizens in all of their rights of citizenship, we especially commend the present Congress in its course in vindication of an honest ballot and fair count by its action in seating the members legally elected to that body.

2. That the personal and official bearing of President Arthur, in his succession to the lamented Garfield, is worthy of all respect and commendation, and the general administration of the duties of his office meets with the approval of the Republicans of Iowa.

3. We commend with equal pleasure and pride the faithful and efficient administration of the affairs of our State.

4. We favor the creation by Congress of a department of industry and the taking of prompt measures to protect Western cattle from contagious diseases.

5. We favor an equitable revision of the tariff, and yet so as to encourage home industries and protect labor.

6. We are in favor of and demand a modification of the patent laws to prevent reissues, and to protect innocent purchasers of patented articles in open market.

7. We favor national legislation regulating interstate commerce, to the end that the system of pooling by parallel and competing lines of railway, and unjust discrimination against non-competing points, may be so controlled as to afford healthy competition to all sections of the country in the carrying-trade.

8. We also favor, as a further solution of the question of transportation, the renewed efforts looking to the practical and judicious improvements of the waterways which Nature has afforded for cheaply transporting the commerce of the States.

The Democratic State Convention met in Marshalltown, on the 16th of August, and nominated T. O. Walker, for Secretary of State; John Foley, for Treasurer; William Thompson, for Auditor; J. H. Brennerman, for Attorney-General; H. T. Bonarden, for Clerk of Supreme Court; A. L. Palmer, for Reporter; and C. G. Bronson, for Judge.

The following is the platform adopted:

1. The Democratic party, in convention assembled, declare for the great principles which are the foundation of free government, among which are equal rights

to all, special privileges to none; the protection of the weak against the encroachments of the strong; equal taxation, free speech, free press, free schools, and, first of all, a free and incorruptible ballot.

2. *Resolved*, That we favor reform in the civil service, and denounce the extortion of money from office-holders to corrupt the ballot and control the elections as the most threatening as it is the most insidious danger that besets the Government this day.

3. *Resolved*, That we denounce the reckless extravagance of the Republican party, and demand an immediate reduction of taxes to the lowest figures which will enable the Government to meet all its obligations.

4. *Resolved*, That no special industry should be fostered to the injury of another; that no class of men should be taxed directly or indirectly for the benefit of another; that every description of industry should stand or fall on its own merits; that the existing protective tariff is an outrageous scheme to plunder, and in principle and detail violates every principle of right and justice.

5. *Resolved*, That the late amendment to the pharmacy law of the State has made the same burdensome and is unjust, and we favor the repeal thereof.

6. *Resolved*, That the Democracy of Iowa are opposed to all sumptuary enactments. While we deplore the passage of the prohibition amendment to the Constitution, we are resolved by every legal measure to eliminate the obnoxious measure from the Constitution of the State.

7. *Resolved*, That the right of the State to regulate the railways of the State in their charges for the transportation of freight and passengers having been fully established and declared by the courts, we demand the exercise of this right by our State Legislature, and we arraign the Republican party of this State for their failure to give the people relief. The establishment of that principle entitles to a large amount of public lands and subsidies these corporations have received from the Government, and the people demand that they should be regulated by law; that the Constitution confers on Congress complete power to give the people redress in control for carrying from one State to another. Possessing such power, it is the duty of Congress to compel these corporations to perform their duty to the public as common carriers for a reasonable compensation.

The following additional resolution was adopted:

*Resolved*, That we tender our sympathy to the oppressed of all nations, and to Ireland especially, in her present struggle to attain her freedom.

The Greenback State Convention was held in Des Moines on the 7th of June. The following nominations were made: For Secretary of State, William Gaston; for Auditor, D. A. Wyant; for Treasurer, George Derr; for Attorney-General, James A. Rice; for Judge, W. H. Jones; for Clerk, E. M. Clark; and for Reporter, J. H. Williamson.

The platform adopted is as follows:

1. That we reaffirm the principles of our party as declared at our State Convention in 1881.

2. We are opposed to the monopoly of money through the national banking system, and favor the General Government issuing all currency, making it a full legal tender, and keeping its volume uniform with the requirements of increasing business and population.

3. We are opposed to all refunding of the interest-bearing national debt, which places it beyond the power of the national Government to pay at will; and we demand that said debt be paid as rapidly as possible.

4. We favor the unlimited coinage of gold and silver on equal terms.

5. We are opposed to the present system of allow-



ing railroad and telegraph monopolies to determine the rates for transporting persons or property over railroads or for the use of telegraphs, and hold that all corporations created by law should be governed by law in the interest of the people, and we regard the Iowa Railroad Commission as a willful and intentional hindrance to that end.

6. We are opposed to the monopoly of land, and demand that all public lands, including those forfeited by non-compliance with law, shall be held for actual settlers.

7. We hold that the representatives of labor have the right to combine, to protect all their constitutional rights, and that they should be protected by law in the exercise of that right.

8. That our present laws for the granting of patents should be so amended as to prevent the courts from assessing damages against innocent purchasers, who in open market purchase any patented article, which may be an infringement on any other patent.

9. We are opposed to all monopolies, and are in favor of equal rights, equal taxation, and equal benefits for all, with special privileges for none, and we hold that that is the best government wherein an injury to one concerns all.

10. We favor a revision of the tariff laws in the interest of American labor, and not in the interest of corporations and monopolies.

11. We urge upon all anti-monopolists of this State to consider the utter hopelessness of obtaining the relief by them demanded at the hands of either of the old parties, and request them to unite with us to assist in gaining these ends, and we pledge them to make that question one of great prominence, and that our candidates shall constantly labor to secure these desired reforms.

**ELECTION RETURNS.**—The election in November resulted in the choice of the Republican ticket. The following is the vote:

Secretary of State: J. A. T. Hull, 149,051; T. O. Walker, 112,180; William Gaston, 30,817; scattering, 350.

Auditor of State: John L. Brown, 148,396; William Thompson, 112,211; P. A. Wyantt, 30,830; scattering, 342.

Treasurer of State: Edwin H. Conger, 148,329; John Foley, 112,561; George Derr, 30,209; scattering, 340.

Attorney-General: Smith McPherson, 148,344; J. H. Brennerman, 112,427; James A. Rice, 30,867; scattering, 329.

Judge of Supreme Court: William H. SeEVERS, 149,220; Charles E. Bronson, 112,060; M. H. Jones, 27,865; scattering, 347.

Clerk of Supreme Court: Gilbert H. Pray, 148,648; H. F. Bonarden, 112,087; E. N. Clark, 29,514; scattering, 375.

Supreme Court Reporter: Ezra C. Ebersole, 148,710; L. A. Palmer, 112,494; J. H. Williamson, 27,175; scattering, 28.

Eight Republican Congressmen were elected, two Democratic (Second and Ninth Districts), and one Greenback (Fourth District).

**TORNADO.**—On the 17th of June, one of the most destructive tornadoes on record swept over central Iowa. Its greatest devastation seems to have been wrought at Grinnell, where a considerable part of the town, including the buildings of Iowa College, was destroyed, and many persons were killed and wounded. Throughout its course over one hundred persons are said to have been killed, while the loss

of property was estimated at \$2,000,000 to \$3,000,000.

**ITALY**, a kingdom of Southern Europe, constituted in 1861, when Victor Emanuel assumed for himself and his descendants the title of King of Italy, and proclaimed the Constitution granted by his father, Charles Albert, to Sardinia in 1848. The executive power is vested in the sovereign, and is exercised through responsible ministers. The legislative power belongs jointly to the two Houses of the Legislature and the King. The Senate is composed of an unlimited number of members, nominated by the King, the conditions of their nomination being the occupancy of an important office, distinction acquired in literature, science, or other honorable occupation, or the payment of 3,000 lire, or francs, in taxes annually. In the Chamber of Deputies a member is allowed for every 40,000 inhabitants. The Deputies are elected by ballot, every citizen over twenty-five years of age who pays taxes amounting to forty lire yearly being entitled to vote. The lower ranks of officials and the ordained clergy are ineligible. Senators and Deputies serve without indemnity. The number of Senators in 1880 was 270, and the number of Deputies in 1881, 508. Legislation can originate in either House, but the Chamber of Deputies has the exclusive right to vote money.

The King, Humbert I, born March 14, 1844, the eldest son of Victor Emanuel, succeeded to the throne January 9, 1878.

The Ministry, formed May 29, 1881, is composed as follows: President of the Council and Minister of the Interior, Agostino Depretis; Minister of Finance, Agostino Magliani; Minister of Justice and Ecclesiastical Affairs, Giacomo Zanardelli; Minister of Foreign Affairs, P. S. Mancini; Minister of War, General Eduardo Ferrero; Minister of Marine, Vice-Admiral Baron F. Acton; Minister of Public Works, Antonio Baccarini; Minister of Agriculture, Industry, and Commerce, D. Berti, successor to Carlo Miceli; Minister of Public Instruction, Giambattista Bacelli.

**STATISTICS.**—The total population of Italy, according to the census of December 31, 1881, and of each of the main political divisions, with their areas in square kilometres (one square kilometre = 0.386 square mile), were as follow ::

POLITICAL DIVISIONS.	Area.	Population.
Piedmont.....	29,494	3,070,879
Liguria.....	5,407	892,373
Lombardy.....	24,205	3,850,615
Venetia.....	24,025	2,514,173
Emilia.....	20,749	2,138,391
Umbria.....	9,474	572,060
The Marches.....	9,835	989,279
Tuscany.....	24,062	2,208,516
Rome.....	12,170	903,472
The Abruzzi and Molise.....	17,008	1,817,315
Campagna.....	16,556	2,506,579
Apulia.....	20,510	1,587,713
Basilicata.....	10,854	524,886
Calabria.....	15,048	1,267,907
Sicily.....	25,798	2,928,841
Sardinia.....	23,342	632,002
Total.....	288,589	28,450,451

The population of the principal cities was as follows:

CITIES.	Commune.	Town.
Naples.....	494,314	468,172
Milan.....	321,839	214,004
Rome.....	300,467	272,010
Turin.....	252,832	226,307
Palermo.....	244,991	205,712
Genoa.....	179,515	138,081
Florence.....	169,001	122,039
Venice.....	132,826	129,276
Messina.....	126,497	76,982
Bologna.....	123,274	103,998
Catania.....	100,417	97,355
Leghorn.....	97,615	77,781
Ferrara.....	75,518	25,814
Padua.....	72,174	47,384
Verona.....	68,741	60,708
Lucca.....	68,063	20,421
Alexandria.....	62,464	30,761
Brescia.....	60,680	43,354
Bari.....	60,575	53,266
Ravenna.....	60,573	12,100
Modena.....	58,053	81,053
Pisa.....	53,924	26,557
Pistoia.....	51,552	12,224
Perugia.....	51,354	17,395
Reggio.....	50,651	18,694
Ancona.....	47,739	28,557
Parma.....	45,217	44,492

The emigration in 1881 amounted to 135,832 persons, against 119,901 in 1880, 119,831 in 1879, 96,263 in 1878, 99,213 in 1877, and 108,771 in 1876.

The number of marriages and births and deaths, including still-births, for the last five years reported, was as follows:

YEAR.	Marriages.	Births.	Deaths.	Excess of births.
1876.....	225,453	1,116,790	829,439	287,351
1877.....	214,972	1,060,443	819,223	241,220
1878.....	199,885	1,048,730	844,835	193,895
1879.....	213,096	1,097,773	870,307	227,471
1880.....	196,738	983,305	900,397	82,908

The Roman Catholic faith is nominally the state religion; but since the establishment of the kingdom and the subsequent suppression of the temporal government of the Pope, the church and the clergy possess no authority in the state that is not regulated by the Government, which has placed all creeds on practically the same footing. There have been futile attempts, under the new laws, to propagate Protestant creeds. Of the total population in 1871 of 26,801,154 souls, 26,658,679, or 99½ per cent, were Catholics, 58,651 Protestants, 35,356 Israelites, and 48,468 of other faiths and professed non-believers. There are 45 archiepiscopal and 198 episcopal sees, many of which, during the conflict between the Government and the Church, have been left vacant, owing to the refusal of the Government to accept the nominees of the Pope, the royal consent being necessary for their installation. The number of religious houses was reported in 1865 to be 2,382; the number of religious persons, 28,991, of whom 14,807 were men and 14,184 women. The proportion of priests to the general population was reported in 1869 to be 7 per thousand, the average proportion

in other Catholic countries being 4½ per thousand. The Siccardi law, passed by the Sardinian Chamber in 1850, and extended over the rest of Italy in 1861, had the effect of diminishing the number of the clergy by cutting off a great part of their incomes. In 1866 a law was passed abolishing the corporate existence of the religious orders and confiscating their property.

A large part of the confiscated property of the monastic establishments was applied to popular education. In 1882 there were primary schools maintained in 7,533 of the 8,276 communes. The number of teachers employed was about 41,000, of whom one half were women. The annual appropriation for the schools is 31,000,000 lire.\* There were also 7,422 private elementary schools, employing 7,422 male and 4,444 female teachers, and attended by 63,000 male and 92,228 female pupils. There are besides 11,161 evening schools for males and 492 for females, the former with 439,624, the latter with 16,063 scholars. In the twenty-two universities there were 12,580 students in 1878. An inquiry into the illiteracy of conscripts called into service at the age of twenty-one, in 1868, revealed the fact that 64·27 per cent at that time were without the rudiments of education. From statistics collected in 1871, the proportion of totally illiterate above six years of age was 42 per cent of the males and 53 per cent of the females, throughout Italy. In 1882 the proportion was found to have diminished to 35 per cent of the males and 47 per cent of the females. Between the ages of twenty and twenty-five there were 28 per cent fewer totally illiterate persons than ten years before. The proportion of illiterate conscripts decreased to 52 per cent† in the conscriptions of 1879 and 1880, about the same as in Hungary.

The lines of railroad in operation at the beginning of 1881 had an aggregate length of 8,713 kilometres. The receipts in 1880 were 180,106,819 lire. The total cost of their construction was 2,616,737,000 lire.

The post-offices in 1880 numbered 3,328; the number of letters and postal-cards sent, 165,824,944; of printed inclosures, 155,218,754; of postal-orders, 3,972,418. The receipts were 28,189,618 lire, and the expenses 24,357,935 lire.

The length of telegraph lines at the beginning of 1882 was 26,880 kilometres; of wires, 89,150, besides 185 kilometres of submarine cable. The number of dispatches sent was 6,250,496, of which 5,015,005 were private domestic, and 517,599 private international mes-

\* One lire = 19·3 cents.

† Austria has made more rapid progress than Italy in education. In 1867 the proportion of illiterate conscripts was about the same in both countries; but it has been reduced to 39 per cent in Cisleithan Austria. In France the proportion is only 14 per cent, in Belgium 19. In Germany, the levy of 1880 showed 1·37 per cent. In Württemberg there were virtually no illiterates arriving of age, in Bavaria only 0·47 per cent, and in other provinces low percentages; but in Slavie Posen the proportion rises to 11 per cent.



sages. The receipts amounted to 12,051,308 lire.

COMMERCE.—The special imports in 1881 amounted to 1,225,600,000 lire, the exports to 1,192,300,000 lire, as compared with 1,225,600,000 lire of imports and 1,132,300,000 of exports in 1880; 1,261,700,000 lire of imports and 1,170,000,000 of exports in 1879; 1,070,600,000 lire of imports and 1,045,300,000 of exports in 1878; 1,156,300,000 lire of imports and 953,200,000 of exports in 1877; and 1,327,200,000 lire of imports and 1,216,800,000 lire of exports in 1876. The falling off of exports in 1876 was due to a deficient harvest, the second in three years. Of the imports of 1881, cereals stood for 70,400,000 lire, which were nearly balanced by the exports; while in the preceding year the imports were 163,400,000 lire, and the exports 76,200,000 lire. The exports of wines, etc., amounted to 64,900,000 lire, against 51,000,000 lire the year before; the imports to 7,200,000, against 17,200,000 lire. Tropical produce was imported to the amount of 85,800,000 lire, against 65,000,000 lire the year before; tobacco to the amount of 17,700,000 lire. The exports of fruits, etc., amounted to 59,900,000 lire. The exports of animal-food products amounted to 85,300,000 lire, a decrease of 17,600,000 lire; the imports to 90,700,000 lire, an increase of 11,400,000 lire. The total imports of articles of consumption amounted to 290,000,000 lire, a decrease of 76,600,000 lire; the total exports to 286,600,000 lire, a decrease of 9,400,000 lire. The total imports of raw materials amounted to 341,900,000 lire, a decrease of 56,700,000 lire; the exports to 418,800,000 lire, a decrease of 3,300,000 lire. The coal imports, which amounted to 60,700,000 lire in 1880, almost ceased, and the metal imports declined from 57,900,000 lire to 36,200,000 lire. Textile materials, of the value of 194,600,000 lire, showed slight, and minerals, hides, etc., larger increments. The export of silk makes up the bulk of the exports of raw materials, the exports under the head of textile materials amounting in 1881 to 351,800,000 lire, being 6,800,000 lire more than the preceding year. The imports of manufactured articles amounted to 262,500,000 lire, a decrease of 23,500,000 lire; the exports to 118,200,000 lire, a decrease of 62,100,000 lire. There was a smaller importation of plant and partly manufactured articles, and an increased importation of articles for consumptive use. The imports of the miscellaneous class amounted to 344,500,000 lire, an increase of nearly 200,000,000 lire, and the exports to 340,900,000 lire, an increase of nearly 66,000,000 lire. The efforts to return to a specie basis increased the imports of precious metals from 39,500,000 to 93,100,000 lire, while the exports were 27,800,000 lire, against 28,900,000 lire.

The commercial intercourse with the principal foreign countries is shown in the following table, giving the imports from and the exports to each in millions of lire:

COUNTRIES.	IMPORTS.		EXPORTS.	
	1880.	1881.	1880.	1881.
France .....	304	364	503	551
England .....	239	361	83	82
Austria .....	181	218	166	150
Switzerland .....	84	37	102	134
Russia .....	84	30	18	27
United States and Canada .....	75	62	54	57
German Empire .....	87	66	78	68
South America .....	42	37	26	32
Turkey, Servia, and Roumania .....	85	27	14	17
Other countries .....	119	126	84	70
Total .....	1,225	1,332	1,132	1,192

The total number of vessels engaged in foreign commerce entering Italian ports in 1881 was 16,294, of 4,781,130 tons, of which 10,015, of 1,463,644 tons, sailed under the Italian flag; 12,911, of 3,881,172 tons, were laden; and 4,508, of 3,539,879 tons, were steamers, among them 979 Italian steamers, of 663,535 tons. The number departing was 15,663, of 4,429,872 tons, of which 10,860, of 2,980,280 tons, were laden, and 4,251, of 3,169,703 tons, steamers. The number of arrivals in the coasting-trade was 93,890, of 11,334,633 tons; the number of departures, 93,751, of 11,525,069 tons. Of the arrivals, 90,153, of 8,676,214 tons, were Italian, and 20,516, of 8,990,990 tons, steamers. The above returns do not include 352,235 vessels which put into port from necessity. The number of vessels registered in Italy was, in 1881, 7,815, of 989,057 tons, against 7,980, of 990,196 tons, in 1880. The sail-ships decreased from 7,822, of 922,146 tons, to 7,639, of 895,359 tons; the steamers increased from 158, of 77,050 tons, to 176, of 93,698 tons.

ARMY AND NAVY.—The Italian army is constituted on the system of universal liability to arms. Enough young men to keep up the active army are called into the service every year. The rest are drilled for forty days and enrolled in the reserve. The time of service in the standing army is three years in the infantry and five years in the cavalry. The carabinieri and certain of the administrative troops have the option of prolonging their time to eight years, which releases them from further liability to service. The time is reduced to one year, as in Germany, for such as are able to pass the requisite examination. By a law passed June 9, 1882, the war effective was augmented by 100,000 men. The army is now organized as follows:

STANDING ARMY.—Ninety-six regiments of infantry of the line and 12 regiments of bersaglieri, each regiment with 3 battalions of 4 companies and a depot, besides 6 regiments of Alpine troops, and 98 companies distributed over 87 military districts; 22 regiments of cavalry, each of 6 squadrons and a depot, besides 5 depots of remount; 12 regiments of field-artillery, each of 10 batteries, with 3 companies of train and a depot, 2 brigades of new flying artillery, of 2 batteries each, 5 regiments of heavy artillery, of 12 fortress or coast batteries and a depot each, and 2 brigades of

mountain-artillery of 4 batteries each, besides 5 companies of artificers and 1 of veterans; 4 regiments of engineers, comprising 2 of sappers, 1 of pontonniers, and 1 of railroad and telegraph troops; and 11 territorial legions of carabinieri, besides 1 of *élèves*. There are in the departmental services 4 companies in the invalid corps, 12 in the sanitary corps, and 12 in the commissariat, besides the *personnel* of the paymaster's department, the veterinary corps, the corps of administration, and the establishments and institutions of instruction, with 15 companies and 2 houses of correction connected with the penitentiary establishments.

**MOBILE MILITIA.**—Forty-eight regiments of line infantry, with 3 battalions of 4 companies each, 18 battalions of bersaglieri, of 4 companies each, and 36 companies of Alpine troops; 13 brigades of field-artillery, of four batteries each, 32 companies of artillery for fortress and coast service, and 4 batteries of mountain-artillery; 25 companies of engineers, formed into 5 brigades of sappers, 1 of pontonniers, 1 of railroad troops, and 1 of telegraphists; 12 companies in the sanitary service, and 12 in the commissariat; and the special militia of Sardinia, consisting of 3 regiments of line infantry, 1 battalion of bersaglieri, 1 squadron of cavalry, 1 brigade of field-artillery, etc.

**TERRITORIAL MILITIA.**—Three hundred and twenty battalions of infantry, of 4 companies each; 30 battalions of Alpine troops, forming 72 companies; 100 companies of heavy artillery, and 30 of engineers. The territorial militia is required to drill only thirty days every four years, but may be called into camp for a portion of this time every year.

The nominal war effective of the Italian army was 1,990,000 men; 690,000 in the standing army, 300,000 in the mobile militia, and 1,000,000 in the territorial militia. The new law adds 100,000 by increasing the annual contingent of the standing army. The effective on September 30, 1881, was as follows:

<b>Standing army:</b>	
Infantry .....	251,152
Military districts .....	284,007
Alpine companies .....	16,050
Bersaglieri .....	42,741
Cavalry .....	86,012
Artillery .....	62,544
Engineers .....	14,733
Carabinieri .....	19,637
Subsidiary services .....	12,096
Officers .....	14,710
<b>Total .....</b>	<b>733,712</b>
<b>Mobile militia:</b>	
Line and bersaglieri .....	267,067
Artillery .....	22,606
Engineers .....	8,068
Officers .....	2,840
<b>Total .....</b>	<b>295,061</b>
<b>Territorial militia .....</b>	<b>825,084</b>
<b>Total war footing .....</b>	<b>1,856,036</b>

The navy consisted in 1881 of 72 vessels. (See NAVIES OF EUROPE.)

**FINANCES.**—There have been annual deficits since the establishment of the kingdom, aver-

aging nearly 500,000,000 lire, or francs, between 1863 and 1868, and over 200,000,000 lire from the latter year down to 1876. The deficits have been much smaller of recent years, and shown a tendency to decline, the accounts for 1878 actually exhibiting a small surplus. The financial estimates have almost invariably overstated the revenue, while the expenditures turned out to be greater than was calculated, mainly on account of the excessive disbursements for the army. There was a saving on the estimated expenditures of 6,000,000 lire and an increased productiveness of the taxes of 43,000,000 beyond the estimated amount. The income tax, the register and stamp duties, the grist-tax, the building-tax, and the customs, all showed augmented receipts, the increase in the custom-house receipts amounting to nearly 19,000,000 lire. The tobacco duties and the octrois, in which the state shares, showed, on the other hand, a falling off.

The budget estimates for 1882 place the ordinary receipts at 1,360,842,338 lire, the ordinary expenditures at 1,321,405,359, and the extraordinary receipts at 837,061,690 and expenditures at 857,998,509 lire; total receipts 2,197,904,028, and expenditures 2,179,403,868 lire, leaving an estimated surplus of 18,500,160. The large increase over the receipts and expenditures of the foregoing years is due to the raising of a loan of 650,440,000 lire and its application to the resumption of specie payments. The product of direct taxes, embracing the land, building, and personal property taxes, is estimated at 381,627,451 lire; of stamps, registry and succession duties, tax on railroad receipts, etc., 169,021,900 lire; of state and ecclesiastical funds, 27,228,750 lire; of customs duties, imposts on the manufacture of beer, powder, etc., monopolies of tobacco and salt, octrois, and grist-tax, 472,199,245 lire; of the state lottery, 72,500,000 lire; of the railroads, telegraphs, posts, and other public services, 116,201,825; from other sources, 17,823,559; compensatory, or repayable receipts, 94,237,608. Of the extraordinary receipts, 28,957,805 lire come from the sale of ecclesiastical property, domains, etc., 28,886,688 from the recovery of debts, 668,077,185 from new loans, and 102,188,317 from funds for the construction of new railroads. The interest on the consolidated debt consumes 428,393,509 lire of the ordinary expenditures; interest on the temporary debt, 42,077,218; liquidation of debts, 41,915,039; annuities for the purchase of railroads in Upper Italy, 28,981,095; the floating debt, 42,869,714; pensions, 21,374,024; civil list and appanages, 15,250,000; expenses of collection and administration, 133,233,800. The annual dotation of 3,225,000 lire, granted to the Supreme Pontiff, has been refused by the present as well as the late Pope, and is paid over to the ecclesiastical fund.

The public debt amounted to 2,439,000,000 lire in 1860, the year before the consolidation of the monarchy. The constant deficits had



increased it to 9,750,000,000 lire in 1873, made up as follows:

	Lire.
Funded debt.....	7,091,829,661
Redeemable debt.....	1,642,773,107
Treasury bonds.....	183,010,500
Paper currency.....	840,000,000
Total.....	9,757,613,268

The consolidated debt, except a small portion, bears interest at 5 per cent. The interest on most of the redeemable loans is also 5 per cent, though some bear 3 per cent interest. The total expenditure on account of the public debt in 1881 was 527,611,000 lire.

The gradual reduction of the enormous deficits of twenty years, and the final attainment of a surplus, notwithstanding heavy incidental expenses and considerable remissions of taxes, has occurred during Magliani's ministry, and is to some extent his work. The Minister of Finance, in presenting the most satisfactory financial statement ever heard in Italy, expressed the belief that the forced paper currency would be abolished in accordance with the law, and that the remaining grist-tax would be removed by 1884, the date set, but that it would be unsafe to exceed the limit of military expenditures agreed upon with the Minister of War, which is 200,000,000 lire a year, besides the extraordinary army expenditures for projects which will take 324,000,000 between 1880 and 1885.

FOREIGN RELATIONS.—The progress made by Italy in the direction of good government and well-ordered finances has not occupied the thoughts of the Italians as much as foreign affairs. Besides the differences with the Pope, which have been aggravated recently, the volatile Italian public has been in a constant fever over questions of foreign policy. The Government, of which Bismarck made the famous speech, that one step further to the Left would plunge Italy into the abyss of republicanism, has been prudent enough when it came to final action; but to court the popular favor it has endeavored to secure the extension of Italian power in various ways, and been repeatedly obliged to withdraw from an untenable position, while at home it has allowed the Irredentist and Anti-Clerical Radicals to compromise it by their inadequately rebuked excesses. At the beginning of the year the irritation over the French seizure of Tunis was still acute. The Italians, in their desire for external expansion, had first cast their eyes on Albania, where their consular agents were long busy preparing the way for Italian annexations on the opposite shore of the Adriatic. When the Berlin Congress commissioned Austria to take possession of Bosnia and Herzegovina, the idea of "compensation" for Italy was suggested in the press, while the Irredentist longings for the acquisition of the Trentino, Istria, and Dalmatia, were agitated afresh. Count Corti, the then Minister for Foreign Affairs, was wise enough to avoid exposing

his country to the certain rebuff which the advocates for compensation would have risked, although he sacrificed his popularity by his decision. The Italians next turned their attention to Tunis. The Italian diplomatic agent, Maccio, and the French agent, Roustan, engaged in a conflict for predominant influence in the regency, which the republic ended by invading the territory of the Bey, on the pretext of punishing the Kroumirs, and reducing him to the condition of a French vassal. The helpless position in which they stood when their prize was wrested from them, led the Italians to abandon their policy of keeping their "hands free," and sinking their differences with Austria, to seek an understanding with the German powers.

The Papal question was another element in the situation. At the beginning of 1882 Bismarck was seeking to arrange a *modus vivendi* with the Vatican, and courting the support of the Clerical party for his internal schemes. Simultaneously, the Pope for the first time took a firm and vigorous stand for the rights of the Church. The alarm of the Government circles was not justified by any immediate interposition of foreign influence; but the question seems to be arriving at a phase where, if Italy does not assure to the Church a tolerable status, other powers will intervene.

The European situation forbade anything further than a platonic friendship with the German powers, which would be the last in Europe to support Italy in any schemes for immediate territorial aggrandizement. When the Egyptian question arose, Italy relied on this alliance and the European concert to secure her the position in Egypt which she has long demanded, and refrained from seizing the opportunity to co-operate with England after the retirement of France. The stand which she took in the negotiations was a more dignified and important one than had before fallen to her share in the European concert (see EGYPT). The bold and rapid action of England produced an outburst of angry denunciation in Italy similar to that called forth the year before by French operations in Tunis. If the apathy of Germany continues, and England is permitted to take full possession of Egypt, Italy will perhaps awaken from her dream of empire and discover that, in spite of her expensive armaments she is a great power only on sufferance. By the settlement of the Papal question, without the sacrifice of unity or liberal institutions, by calling all her citizens into her political councils, and by reducing the burden of military expenditure, Italy can not only develop her internal resources and improve the material condition of her people, but extend her commerce in the undeveloped parts of the world without the aid of cannon and protectorates. There is no people in Europe with equal faculties for endurance, economy, application to details, and all the practical elements of success, when not misled by impracticable illusions.

The Government has pursued a scheme for extending Italian commerce in East Africa, ever since the opening of the Suez Canal. In 1870 the head of the Rubattino Steam Navigation Company purchased a strip of coast in the bay of Assab, in the Red Sea, on the eastern coast of Africa, north of the Strait of Babel-Mandeb. In June the Chambers passed a bill authorizing the Government to acquire the territorial rights purchased by Rubattino from the native chiefs, and establish a colony there. The law exempts the colony from taxation for thirty years, makes the port free to all the world, and empowers the Government to grant concessions of land to Italians, natives, or strangers. The Mussulman laws are to be administered to Mohammedans, and Italian laws to Europeans. The Government proceeded to establish the trading colony. England raised a question as to the rights acquired by the Italian Government. The Porte claimed suzerainty over the African shores of the Red Sea, and the Khedive asserted these powers by delegation from the Porte. England had herself purchased territorial rights in these regions from the native chiefs, but afterward, when the Khedive, Ismail, seized upon territories of the Sultan of Zanzibar, she recognized the assumed sovereignty of Egypt over the east coast of Africa, as far as the ninth parallel of latitude. After taking possession of Egypt, England induced the Khedive to revive his claim of jurisdiction over this region in order to exact conditions from Italy with respect to this, her first colonial establishment. The extent of the territory acquired was also called in question. Italy was fain to agree to the demands of the British Government, which were that no fortifications or military forces should be maintained in the colony, that a large portion of the acquired territory should be relinquished, and a corollary with reference to the suppression of the slave-trade.

The commercial treaties with England, Germany, Belgium, Spain, and Switzerland were extended until June 30, 1883. A resolution was adopted recommending that they should not be prolonged after that date, and that, if arrangements could not be made like those with France and Austria, retaliatory duties

should be imposed on imports from countries which subject Italian products to differential treatment.

**LEGISLATION.**—The extension of the suffrage which was passed in 1881 was supplemented before the close of the session by the change of the mode of elections to the *scrutin de liste*, or collective ticket, which was adopted by a vote of 286 to 133. The completion of the Government project for electoral reform was the only important result of the session. With this accomplished, and the arrangements for the return to specie payments made and for the needed revision of the tax system under way, Mancini announced in the royal address at the reopening of Parliament the inauguration of important projects of social reform.

**PUBLIC EVENTS.**—The death of Garibaldi in June called forth an exhibition of national regret and gratitude which has not been equaled upon the departure of any man of modern time. In obedience to the will of the nation, the body of Garibaldi was not burned, as he requested, but was given a state funeral. The celebration, on March 31st, of the anniversary of the Sicilian Vespers, was the occasion of another of these demonstrative exhibitions of patriotism. The Republicans and Irredentists were unusually noisy in 1882. The crime of Overdank, which he expiated in Trieste (see AUSTRIA), was made the subject of political demonstrations in the latter part of the year. The press and the public elevated the executed conspirator into a national hero. The Austrian envoy to the Papal court, Count Paar, was attacked in the street by a man named Valeriani. Though the Radicals applauded this double insult to Austria and to the Church, the Government proceeded more vigorously to suppress these dangerous manifestations, confiscating newspapers and arresting agitators.

Northeastern Italy was visited in the autumn by devastating floods like those which occurred on the other side of the Alps in Tyrol. Verona and the whole valley of the Adige were inundated. The sufferers were relieved by aid sent from all parts of the kingdom; but the crops, the mills, and houses of large tracts of country were destroyed.

## J

**JAMES, HENRY**, died at his home in Cambridge, Mass., on December 18th, at the age of seventy-one years. He was a graduate of Union College, and studied at the Princeton Theological School, though he never entered the ministry. He is chiefly known as an able and brilliant writer upon theological and allied themes, his chief works being "Moralism and Christianity," "The Church of Christ not an Ecclesiasticism," "The Nature of Evil," "Christianity the Logic of Creation," and

"Lectures and Miscellanies." Professor William James, of Harvard, and the well-known novelist, Henry James, Jr., are his sons.

**JAPAN**, an empire in Eastern Asia. The supreme power resides in the Tenno, or Emperor, usually called the Mikado, who acts through an executive ministry. The reigning Emperor is Mutsu Hito, born November 3, 1852, who succeeded his father, Komei Tenno, in 1867. The succession is limited to the four imperial families known as the Shi Shinno, and usually de-



volves upon the most distinguished or powerful relative of the Emperor. The throne has often been filled by a woman, but she must take a husband, who must be a member of one of the royal houses. The government is constituted in part on European models, the Mikado ruling in accordance with the counsels of his regularly appointed advisers. These are the Ministry, which was established in imitation of European cabinets; the Council of State, of an indefinite number of members; and the Senate, composed of thirty-two members, most of whom are persons who have filled high posts. The first president of the Council of Ministers is Sandjo, the second Prince Arisugawa, the third Iwakura. The ministers at the head of the different departments are: Foreign Affairs, Inuye; Interior, Yamada; Finance, Matsukata; War, Oyama; Marine, Kawamura; Agriculture and Commerce, Saigo; Public Works, Sasaki; Justice, Ogi; Instruction, Fukuoka; Imperial Household, Takeda; Postmaster-General, Nomura.

**AREA AND POPULATION.**—The area and population of Japan, on January 1, 1880, were as follow:

ISLANDS.	Square miles.	Population.
Hondo, or Nippon .....	86,435	27,242,847
Kiushiu .....	14,598	5,212,997
Shikoku .....	7,008	2,618,142
Iki, Tsushima, Awadji, Oki, and Sado .....	998	377,271
Total Japanese islands .....	109,339	35,451,257
Yezo and Curles .....	35,866	163,355
Liuchiu .....	1,556	310,345
Bonin Isles .....	83	156
Total empire .....	147,094	35,925,313

The number of males was 18,210,500; of females, 17,714,813. The density of the population is 325 inhabitants to the square mile on the Japanese islands, about equal to that of the Netherlands, and 244 for the whole empire, or about the same as in Italy.

The population of the empire, on the 1st of January, 1881, is stated to be 36,357,212, classified according to rank as follows: Emperor and family, 5; royal house, 34; Kazokou, 3,146; Shizokou, 1,933,882; Heimin, 34,415,392; and 4,753 persons whose class is not known. The number of Ainos, or aborigines of the Island of Yezo, is estimated by the most recent travelers at only about 17,000. The number of foreigners residing in Japan in 1879 was reported as 2,398 Europeans and Americans, and 3,649 Chinamen.

The city of Tokio had, in 1878, 796,785 inhabitants, and, with the suburbs, 1,064,333. The population of the city was returned, in 1879, as 811,510, and, in 1881, that of the city and suburban districts as 1,140,566. The next largest city is Osaka, the population of which was returned, in 1881, as 291,086. Kioto had 229,810 inhabitants in 1877. Kagoshima, the principal city of the Satsuma Province, has not been enumerated. Nagoya had, in 1880,

a population of 114,978; Kanazawa, in 1877, 108,263; Hiroshima, 75,760; Yokohama, in 1879, 67,499. There are forty other towns of over 20,000 inhabitants.

The number of post-offices, in 1880, was 4,377. The number of letters carried was 34,627,343; of postal-cards, 17,345,212; of newspapers, 14,256,795; total number of mis-sives, 68,944,782, against 55,775,206 in 1878-'79. The receipts amounted to \$1,173,692; the expenses to \$1,091,900.

The length of telegraph in operation, in 1882, was 3,929 miles; of wires, 9,345 miles. The number of dispatches forwarded, in 1881, was 1,272,756.

The total length of railroads in operation was about 100 miles, consisting of short lines connecting Tokio with the port of Yokohama, Osaka with Hiogo and Kioto, and the latter place with Otsu, besides a line on the Island of Yezo, between Otarunai and Sapporo.

**COMMERCE.**—The total imports and exports for the last six years reported were as follow:

YEAR.	Imports.	Exports.
1879 .....	\$32,681,000	\$28,364,000
1878 .....	33,334,392	26,259,419
1877 .....	25,900,541	22,566,708
1876 .....	29,969,004	27,578,851
1875 .....	28,174,194	17,917,845
1865 .....	14,076,988	13,491,480

The staple imports are cotton and woolen fabrics. The imports of European cotton goods in 1879 amounted to \$12,112,000, against \$12,739,000 in 1878; of woolen goods, \$4,172,000, against \$4,637,000; of cotton and woolen mixed, \$1,308,000, against \$1,156,000. The imports of metals amounted to \$1,645,000; of miscellaneous merchandise, \$8,288,000; of Asiatic products (sugar, cotton, etc.), \$5,106,000. The exports of staple articles for 1879 and the preceding year are given in thousands of dollars in the following table:

EXPORTS.	1879.	1878.
Raw silk .....	11,148	8,995
Silk cocoons .....	583	683
Tea .....	7,446	4,413
Copper .....	854	886
Tobacco .....	142	108
Vegetable-wax .....	330	106
Camphor .....	457	310
Coal .....	755	857
Dried fish .....	1,288	1,081
Rice .....	1,029	4,642
Various merchandise .....	4,392	4,248
Total .....	28,364	26,259

The foreign commerce of Japan is divided mainly between Great Britain and the United States, the American share being less than half as great as the British.

Of 992 vessels, of 1,101,502 aggregate tonnage, entering Japanese ports in 1879, 286, of 464,346 tons, were Japanese; 408, of 351,144 tons, British; 153, of 191,488 tons, American; 29, of 44,286 tons, French; and 87, of 37,034 tons, German.

**ARMY AND NAVY.**—Universal and obligatory military service was introduced by an edict of 1875; but exemptions for various causes or for a money price, which is fixed at \$270, are allowed. By the reorganization of the army in 1879 the military forces are divided into four classes, corresponding to the military organization of the German Empire: 1. The active army, recruited by lot from all able-bodied young men as they reach the age of twenty, the time of service being three years. The active army comprises the army of the line and the Imperial Guard, which is composed of picked men from the line regiments who have served six months, and who remain three years longer in active service. 2. The active army reserve, formed of the soldiers who have served their time in the active army; they remain three years in the reserve, and are called out to drill a short time every year. 3. The Landwehr, which is trained in military exercises annually. 4. The Landsturm, composed of all between seventeen and forty years of age who are not in the active army or the reserve; they are to be called out in the case of invasion when the active army and reserves are already in the field. According to the new law, advancement to the grade of officers depends on merit and intelligence. The Guard consists of 2 regiments of infantry, a squadron of cavalry, and a division of artillery. The army of the line is composed of 14 regiments containing 3 battalions of 4 companies each of infantry, 2 squadrons of cavalry; 9 divisions of artillery, each containing 2 batteries of 6 cannon; 9 companies of heavy artillery, and 9 of engineers. The effective in 1880 was as follows:

ARMY.	Peace footing.	War footing.
Infantry (46 battalions).....	86,106	41,382
Cavalry (8 squadrons).....	507	567
Artillery (120 guns).....	3,206	3,800
Engineers (10 companies).....	1,570	1,840
Train (6 platoons).....	510	680
Ministry of War, staff, etc.....	588	588
Gendarmerie and police.....	18,473	18,473
Total.....	61,680	68,180

The navy consists of 31 vessels with 196 guns, including five ironclads, one of which is a frigate with casemates, one a turret-ship, and three corvettes.

**FINANCE.**—The budget for 1879-'80 places the total revenue at 55,651,379 yen, or dollars, and the total expenditures at the same amount. (The gold yen, which is the unit of account, is almost identical in value with the American gold dollar. The silver yen is the same in weight and fineness with the Mexican dollar, and is exactly equal in value to the American trade-dollar. The paper yen, of which there is a large quantity in circulation, is at a discount usually ranging from 25 to 30 per cent.) The total revenue and expenditure in the preceding three years were as follow:

YEAR.	Receipts.	Expenditures.
1876-'77 .....	\$59,481,086	\$59,308,956
1877-'78 .....	52,444,308	48,534,494
1878-'79 .....	61,862,109	59,615,208

The revenue and expenditure for the year ending June 30, 1881, is taken in the budget estimate as \$59,933,507. The estimates for 1882-'83 place the total at \$66,814,122. Of the estimated receipts \$42,945,853 come from the land-tax, and \$10,512,806 from the tax on the manufacture of saké and other alcoholic liquors. Only \$2,600,330 are derived from customs duties. The net profits of the railroads, mines, mint, and other public undertakings, are estimated at \$2,001,166. Of the expenditures \$23,293,204 are on account of the public debt, \$15,055,592 for interest, and \$8,237,612 for liquidation. The civil list and appanages amount to \$1,398,785. The sum of \$1,200,000 is set aside as a reserve against famines. The expenditures for the military are \$6,605,872; for the navy, \$3,161,692; for justice, \$2,070,556; for provincial administration, \$4,185,081; for police, \$2,838,032. The Department of Agriculture and Commerce receives \$1,000,300. Among the extraordinary expenditures are \$5,260,000 reserved as a fund for the encouragement of industry, and \$703,100 for industrial undertakings.

There is a large domestic debt and a small foreign debt. The latter was raised in England, and consisted originally of a 9 per cent loan issued in 1870, of £1,000,000, and a loan of £2,400,000, bearing 7 per cent interest, which was placed in 1875, at the price of 92½. By the operation of a sinking fund the entire foreign debt had been reduced at the beginning of 1882 to £2,134,700. The home debt stood in July, 1880, as follows:

LOANS AT—	Amount.
Four per cent.....	\$11,152,650
Five per cent.....	46,412,555
Six per cent.....	42,104,420
Seven per cent.....	108,131,090
Eight per cent.....	12,245,275
Ten per cent.....	9,098,625
	\$229,139,615
Without interest .....	9,211,776
Total.....	\$238,351,391
Paper money in circulation.....	108,688,204
Total home debt.....	\$347,034,595

The mountainous character of the Japanese islands is strikingly shown by the fact that the tillable plains, inclusive of the cultivated mountain-vales, form only about 12 per cent of the total area. Mountain and valley alternate constantly, the only considerable plains being the alluvial bottom-lands at the mouths of the larger rivers.

The volcanic phenomena of these islands have not yet been examined to any extent. There are eighteen active and a much greater number of extinct volcanoes. Earthquakes are of continual occurrence, but destructive convulsions do not happen oftener than once in



twenty years on the average. Thermal springs are scattered all over the empire, and occur in places remote from the active volcanoes. They are counted by hundreds. Sulphur and neutral waters predominate, while decided chalybeate and alkaline springs are exceptional. The favorite temperature of 40–50° C. is common; but some, notably the sulphur-baths, reach the boiling temperature. The Hakone Mountains, in the Peninsulas of Idju and Atami, are particularly rich in hot springs.

Geological explorations have, until a recent examination, which has been confided to German geologists, been confined to researches for useful minerals. Gold, silver, quicksilver, tin, zinc, and lead are present in no great quantities; but copper and antimony are abundant, and coal and iron have been found in large quantities. Coal-beds have been discovered in numerous parts of the country, but principally on the Island of Yesso. They are not very thick nor of the best quality, but contain all varieties from the oldest anthracite to the most recent bituminous deposits. Petroleum is obtained in several provinces, but not in sufficient quantities to supply the home demand.

The climate of Japan, allowing for the wide difference in latitude between the northern and southern portions of the island empire, is essentially regulated by the monsoons. It takes its character from the warm, moist south winds of the summer and the cold and raw north and northwest winds of the winter. The east and west coasts vary considerably in climatic character. The coast-lands on the Yellow and Japan Seas resemble the opposite coast of the Asiatic Continent in their hot and moist summer and long and relatively cold winter, while the other side of the islands, under the influence of the Kuro Siwo, is characterized by cooler summers and milder winters and by constant moisture throughout the year. The winter is so severe as to limit the period of vegetation for most plants to five months in Yesso, to six months in middle, and to seven months of the year in southern Japan; the growth of even the evergreen trees is interrupted. Even in the south vegetation is still very backward in April; but in the beginning of May commences the luxuriant and rapid development of a flora which is tropical in its profusion and variety. The rich and strange insular flora of Japan deserves the attention which botanists have given to it. The Japanese themselves, by their careful descriptions and drawings of plants, which they were prompted to make by their national love of flowers and by their cultivation of the ancient Chinese medical art, have assisted the systematic botanists considerably to understand these peculiar forms which throw a new light on the questions of the development of the vegetable kingdom and the geographical distribution of plants. The climatic paradoxes are exaggerated in the familiar illustration of the bamboo and the palm growing side by side with the fir and the

evergreen oak. The bamboo reed is the product of artificial culture, and is not raised, except in spots, north of the Bay of Yeddo. The indigenous *Cycas revoluta* must be protected at Tokio by straw bands from the wintry frosts.

According to the seventh annual report of the Minister of Education, there are 28,025 common schools, of which 16,710 are public and the remainder private, an increase of 1,316 and 125 respectively within the year. There are, besides these, a great number of primary and kindergarten schools. The law of 1872 provided for the gradual establishment of 53,000 elementary schools. Of the 5,251,807 children of school age, 40 per cent are now receiving instruction. In the 31 public and 358 private middle schools 20,000 pupils are instructed. The zeal for knowledge attracts hundreds of students to the house of a private master, famed for thought and erudition, especially in European culture, and is comparable only to that displayed in Europe at the time of the revival of letters. The most famous of these leaders of youth is Fukusawa, of Tokio, author of many treatises on political and social subjects and translations from European languages. His students fill many important offices in the state. Some of them have established a newspaper, in which they criticise the acts of the Government with vigor and acumen. There are 112 daily newspapers and 132 periodical journals, with an annual circulation of 33,500,000 copies. The direction of the extraordinary intellectual activity existing in Japan is revealed in the character of the books licensed to be printed by the Interior Department. In 1881, 545 works on political subjects were issued, against 281 in 1880; 255 on law, against 207. In the natural sciences and mathematics there was a decrease, in the latter, from 116 to 107 only. Books on ethical subjects increased from 32 to 93; on historical subjects, from 196 to 276; on poetry and poetical works, from 491 to 556; on drawing and writing, from 127 to 339; on engineering, from 8 to 28; on commerce, from 70 to 113. School-books are more numerous than any other class, 704 having been published, 4 less than the preceding year. There were 266 journals founded in 1880, of which 47 succumbed. Of the 149 new newspapers started in 1881 only 35 survived. Only one paper of the 415 started in the two years was suppressed by the Government. The total number of works published in 1881 was 4,910, against 3,792 in 1880. Very many are translations or adaptations from European or American books.

FOREIGN RELATIONS.—Japan, like China, is bound in its commercial treaties with Western nations, under the lead of England, by harsh restrictions as to the amount of duties it is allowed to impose upon imports. The Tokio statesmen have endeavored for one or two years to secure a relaxation of these conditions in order to raise the larger revenues which are

necessary for the redemption of the forced paper currency, the extinction of the public debt, and the accomplishment of the important internal reforms which have been undertaken by the Government. Having appealed in vain to the British Government for the revision of the treaties, they propose to call a conference at Berne between representatives of Japan and of the European states to agree upon a common basis for new treaty arrangements. The commercial concessions granted, through the violent proceedings of Commodore Perry, to the United States in 1854, were promptly taken advantage of by England, which, however, demanded far harsher conditions from the intimidated Shogun. Instead of the general import duty of 20 per cent *ad valorem* in Commodore Perry's treaty, the treaty extracted by Lord Elgin in 1858 restricts the tariff on cotton and woolen manufactures to 5 per cent.

The case of O'Neil, tried for murder and convicted of manslaughter by the United States consul at Hiogo, and afterward pardoned by the President, called up in Congress the question of the constitutionality of the laws conferring, in virtue of treaty arrangements, criminal jurisdiction on consuls, vice-consuls, and ministers in Japan, China, and other countries of the East. Murders are almost never punished by these extra-territorial courts, because universal feeling demands the verdict of a jury.

JEVONS, WILLIAM STANLEY, English economist, was drowned while bathing in the sea, near St. Leonard's, on August 13th. Professor Jevons was the son of an iron-merchant, and was born September 1, 1835. His mother was the daughter of the author William Roscoe, and herself wrote poetry. Her son was educated in the Mechanics' Institution High-School at Liverpool and at University College, Lon-

don. From 1853 to 1858 he was assayer to the Royal Mint in Sydney, Australia. He devoted his leisure to scientific observations, the fruit of which was "Data concerning the Climate of Australia and New Zealand." Returning to England, he completed his studies at University College, graduating with honors and becoming a Fellow. In 1866 he was appointed Professor of Logic and Philosophy, and Cobden Lecturer on Political Economy, in Owens College, Manchester. He published before this date works which established his fame as a thinker, a treatise on the "Value of Gold," one on the "Theory of Political Economy," and one on the "Coal Question." In the latter work he took the ground that the coal-supply in Great Britain would eventually become exhausted. His theory excited so much discussion that a royal commission was appointed to investigate the subject. Another work of the earlier period treated of "Pure Logic, or the Logic of Quality." After his connection with Owens College he published in 1869 his "Substitution of Similars the True Principle of Reasoning"; in 1870, "Elementary Lessons in Logic"; in 1871, the "Theory of Political Economy"; in 1874, the "Principles of Science"; and, subsequently, "Money and the Mechanism of Exchange." In 1876 he left Owens College to take the professorship of Political Economy in University College, London. A year before his death he gave up professorial duties to devote himself entirely to writing. In the "Principles of Science" were expounded his logical theories, which were a development of the mathematical method first applied by Boole. The "Theory of Political Economy" is the application of the same methods of reasoning to economics, and embodies his ripest ideas of the fundamental principles of that science.

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KANSAS. STATE GOVERNMENT.—The State officers during the year were as follow: Governor, John P. St. John, Republican; Lieutenant-Governor, D. W. Finney; Secretary of State, James Smith; Treasurer, John Francis; Auditor, P. J. Bonebrake; Attorney-General, W. A. Johnston; Adjutant-General, P. S. Noble; Superintendent of Public Instruction, H. C. Speer; Secretary of Board of Agriculture, F. D. Coburn; Insurance Commissioner, Orrin T. Welch; State Librarian, H. J. Dennis. Judiciary, Supreme Court: Chief-Justice, Albert H. Horton; Associate Justices, David J. Brewer and D. M. Valentine.

GENERAL CONDITION.—Referring to the general condition of the State at the close of the year, the new Governor, in his message to the Legislature, says:

An abundant harvest has rewarded the husbandman for his labor; the stock interests of the State

have been prosperous and remunerative, while labor has been fairly rewarded. All business has been reasonably productive, while the material wealth of the State has steadily and fairly increased, and demonstrates in an eminent and satisfactory manner that our State, while yet in its infancy, is capable of a development that will surprise the thoughtless, and create wonder and admiration in the minds of those who can appreciate the grand development of the past and contemplate its capabilities for the future.

The Secretary of the State Board of Agriculture shows in his report that our wheat-crop was over 35,000,000 bushels, worth over \$24,000,000, and over 157,000,000 bushels of corn, worth nearly \$53,000,000, with a value of our cereal crops alone over \$83,000,000, and a total value of all farm products of \$108,177,520.93, while our live-stock interests represent a cash value of \$83,874,530, making a showing of the capabilities of our young State that we can all rejoice at.

FINANCES.—The cash in the Treasury at the close of the fiscal year amounted to \$644,323.76, belonging to the several funds as follows:



General revenue.....	\$215,188 22
Capitol extension.....	5,882 23
Sinking fund.....	21,714 87
Interest fund.....	74,881 22
Permanent school fund.....	187,769 95
Annual school fund.....	103,726 00
Normal School permanent fund.....	8,578 71
Normal School interest fund.....	1,458 07
University permanent fund.....	10,695 82
University interest fund.....	6,767 99
Railroad fund.....	7,888 60
Military.....	272 03
Total.....	\$644,823 76

In addition to the cash in the Treasury, the sinking fund contained United States and State bonds to the amount of \$218,125. The State debt falling due in July, 1883, amounts to \$61,800, of which \$32,000 is now in the sinking fund, \$16,000 is held by the permanent school fund, \$800 by the State University fund, \$3,700 by the State Normal School fund, and \$8,900 by individuals. On the 1st of July, 1884, \$189,675 falls due, and of this amount \$2,125 is held by the sinking fund, \$47,425 by the permanent school fund, and \$140,425 by individuals. The income to the sinking funds from interest on investments and from the present rate of taxation will be ample to meet these obligations.

The next bonds fall due on the 1st of July, 1886, at which date \$100,000 mature; these, however, can be provided for by the Legislature of 1885.

The present rate of taxation of four tenths of one mill on the dollar, to pay interest on the bonded debt, will prove sufficient to meet all liabilities.

The permanent school fund, in addition to the \$187,769 cash in the Treasury at the close of the fiscal year, contained \$2,280,121.07 in United States, State, and school district bonds. This fund is rapidly increasing, and further legislation will be necessary to provide for its judicious investment. For the past four years a tax of one half mill on the dollar has been annually levied for the purpose of building the State Capitol. "I would suggest," says the Governor, "that this tax be discontinued, and that authority be given to borrow, from time to time, as it may be found necessary to successfully carry on the work, from the uninvested school fund, paying interest thereon at the rate of 4 per cent per annum." The amount subject to investment will soon be \$350,000.

The Legislature of 1879 discontinued the levy of a direct tax for school purposes, hence since that date the annual school fund has been derived wholly from the interest upon the invested permanent school fund, including interest on the unpaid principal of school lands sold, and the fifty-dollar tax on foreign insurance companies doing business in the State. This income from June 30, 1880, to June 30, 1882, amounted to the sum of \$542,928.70, to which should be added the balance in the Treasury July 1, 1880, \$116,000.48—making in all \$659,929.19.

The disbursements during the same period

were \$558,076.18, leaving a balance on hand, July 1, 1882, of \$100,953.01. The sum collected by the several school districts of the State by direct taxation for educational purposes during the same period amounted to \$2,791,825.85—making the total amount expended for the support of common schools in that time of \$3,350,002.03.

The State University permanent fund, at the close of the fiscal year, amounted to \$48,723.59, of which amount \$10,690.82 was cash in the Treasury, and \$38,027.17 in State and school-district bonds. The income from the invested fund, together with the interest on the unpaid principal of university bonds sold, for the two years ending June 30, 1882, amounted to \$12,106.05, to which should be added the balance of the interest fund in the Treasury, July 1, 1882, viz., \$518—making a sum total of \$12,624.05. Of this amount there was drawn from the Treasury during that period the sum of \$5,851.05, leaving a balance on hand to the credit of the State University interest fund on July 1, 1882, of \$6,767.99. The direct appropriations made by the Legislature for the support of this institution for the two years amounted to the sum of \$64,000.12. Of this amount \$63,826.79 was drawn from the Treasury, to which should be added the sum of \$5,851.06 interest fund expended—making a total of \$69,697.85.

The permanent fund of the State Normal School at the close of the fiscal year, June 30, 1882, amounted to \$85,073.71, \$26,475 of which is invested in bonds of the State of Kansas and school-district bonds. The balance, \$8,578.71, is cash in the Treasury. The income to this fund from July 1, 1880, to June 30, 1882, amounted to the sum of \$20,308.07, derived from the interest on bonds and interest on the unpaid principal of sales of Normal School lands. The appropriations made by the Legislature to the State Agricultural College for the two years ending June 30, 1882, amounted to the sum of \$36,729.09, of which \$17,979.09 was paid for the purpose of restoring the endowment and income funds, and the balance for buildings and experiments.

The following is a financial statement of the Penitentiary for the two years:

Cash earnings.....	\$89,548 94
Coal furnished state institutions.....	12,691 81
Improvements and buildings.....	18,467 25
Total earnings.....	\$120,702 50
Total expenditures.....	120,045 99
Balance in favor of prison.....	\$656 51

The total assessed value of the railroad property in the State is \$25,088,156.46; average per mile, \$6,786.43; gross earnings, estimated, \$45,000,000.

The extent and assessed value of the several classes of railroad property for the year 1882 were as follow:

Number miles of main track.....	3,697
Value per mile of main track.....	\$5,151 65
Total value of main track.....	\$19,155,571 00

Number miles of side track.....	346
Average value of side track per mile.....	\$2,000 00
Total value of side track.....	\$691,290 00
Value per mile of rolling-stock.....	\$1,145 84
Total value rolling-stock.....	\$4,288,989 00
Value per mile of tools, machinery, moneys, credits, etc.....	\$94 25
Total value of tools, machinery, moneys, credits, etc.....	\$348,911 29
Value of buildings.....	\$653,945 00
Total value of all property.....	\$25,088,156 46
Average value per mile of all property.....	\$6,786 49

The amount of taxes for all purposes paid by the several railroad corporations in the State of Kansas for the year 1881 was \$740,786.57.

This amount does not include taxes paid on lands, but includes only taxes paid on right of way, track, road-bed, rolling-stock, tools, materials, etc.

The following statement shows the taxes levied upon the property of the people of Kansas for the year 1881, *for all purposes* for which taxes are collected—State, county, city, township, and school district:

State taxes.....	\$857,553 64
County taxes.....	2,178,846 84
City taxes.....	513,117 83
Township taxes.....	612,377 16
School-district taxes.....	1,992,868 08

Total.....\$6,154,258 00  
Average rate on each \$100, \$3.60.

The State debt amounts to \$1,181,975.

#### COUNTY DEBT.

On July 1, 1880, the aggregate county indebtedness amounted to.....	\$7,676,894
Same debt in 1882.....	8,056,736
An increase of.....	\$386,842

#### TOWNSHIP DEBT.

Township debt, July 1, 1880.....	\$2,260,055
Township debt, July 1, 1882.....	2,250,847
A decrease of.....	\$9,707

#### CITY DEBT.

City debt, July 1, 1880.....	\$2,016,797
City debt, July 1, 1882.....	2,102,159
An increase of.....	\$85,662

#### SCHOOL-DISTRICT DEBT.

School-district debt, July 1, 1880.....	\$2,041,858
School-district debt, July 1, 1882.....	2,082,475
An increase of.....	\$40,617

Total debt—State, county, city, township, and school district—July 1, 1882, \$15,653,994.72. This is an increase in the last two years in the aggregate debt, of \$473,415, or 3 per cent. In the same period of time the taxable property of the State has increased 16 per cent. The aggregate debt of all kinds as stated above is equal to 8½ per cent of the taxable property.

STATISTICS.—According to the Secretary of the State Board of Agriculture, there were in the State at the close of the year, 1,404,488 head of neat-cattle, valued at \$49,192,408; 1,228,683 swine, valued at \$12,286,880; and 980,767 sheep, valued at \$2,942,301.

The State has 9,000,000 acres of land under cultivation; \$91,000,000 of taxable lands; \$22,000,000 of town lots; \$22,000,000 of railroad property; \$34,000,000 of personal property, or

an aggregate taxable valuation of \$170,000,000, the true valuation being \$341,000,000.

Of the 1,000,000 people in the State, 348,000 are of school age; 249,000 are enrolled, and 139,000 attend school. Eight thousand teachers are employed to teach in 5,752 school-houses, valued at \$4,800,000.

There have been planted in Kansas, since its settlement, forest-trees as follow:

VARIETY.	Acres.
Walnut.....	9,512
Maple (mostly soft).....	18,545
Honey locust.....	1,916
Cottonwood.....	47,863
Other varieties.....	67,669
Total acreage.....	189,995

The number of fruit-trees planted in the same time is as follows:

VARIETY.	Bearing.	Non-bearing.
Apple.....	3,023,110	3,590,388
Pear.....	97,369	164,302
Peach.....	5,983,140	4,089,808
Plum.....	293,474	389,516
Cherry.....	767,498	756,576
Total.....	11,169,597	8,940,981
Grand total of the five varieties of fruit-trees set out.....		11,169,597
		20,110,123

As a rule, the forest-trees have been set out under the timber-culture act, but a number of thousands have been started by farmers and others who have not a timber claim.

A rough estimate of the amount of spontaneous growth in Kansas is 20 per cent of the number of acres set out. This would make 27,945 acres.

GUBERNATORIAL RECOMMENDATIONS.—The Governor, in his message, makes the following observations and recommendations regarding the death-penalty, assessment of real estate, highways, etc.:

The law fixing the death-penalty should be amended. As it now stands, it is left discretionary with the Executive to issue his warrant to carry out the sentence of the court. No one is willing to exercise discretionary power in a case of life and death, while any Executive would obey the law and issue the warrant in such cases were it mandatory. The warrant then would issue as a matter of course, and the law, and not the Executive, would be responsible for its effect. Though I am clearly of the opinion that the court that renders the judgment and fixes the penalty of the law should provide for carrying into execution the sentence, I am aware that there is a divided sentiment as to whether or not the death-penalty should be invoked in cases of murder. But this is no excuse for leaving the law in its present unsatisfactory condition, as our manhood dictates that the death-penalty should be executed in a reasonable time after sentence, or that the horrors of an anticipated hanging should be ended by a sentence of imprisonment for life. The person who now commits the crime of murder, with all its attendant horrors, is on an equality with the criminal who steals but twenty dollars, and is free to murder his keeper, or the warden of the prison, with the assurance that a score of murders does not increase his punishment. There are now in the Penitentiary about twenty-five persons who are under the sentence of death, who have all the kindly treatment, and the benefits of all rules, and the laws



made to ameliorate the sad condition of prison-life, while the victims of their crime sleep in death, and the relatives of the deceased are taxed to feed and clothe the ones who robbed the wife of a husband, and the children of a father. The existing law is simply an evasion of a plain manly duty, and should be amended at once, though not made retroactive in its operations; it should be certain as to the murders committed in the future.

The present system of appraising or valuing real estate for taxation is very defective. This work is performed by township trustees and city assessors, and thus in many counties there are a dozen or more persons engaged who have different ideas on the subject of values, some interested in reducing them; while others may be giving honest and fair values to real estate, each appears to be anxious to have the land in his township valued less than the others in the county.

This system results in great inequality of appraisal, even in the same county, and places the taxable value of the real estate far below what it should be. While this does not benefit the tax-payer, or reduce or increase the amount of tax necessary to be raised, it works a real injury to the State, and especially our municipal organizations, by making the rate of taxation appear higher than it really is, and suggests to those not cognizant of the abuse of our system, a heavy rate of taxation, when in fact it is quite the reverse. It also fails to show the rapid increase of values, and the true value of the taxable wealth of the State.

I therefore recommend to your favorable consideration, as a means of remedying, in a measure, the more serious defects of the present system, the appointment or election of a county assessor, whose duty it should be to appraise real estate only, every third year, leaving trustees to appraise new structures, as now provided by law. This would secure an equal, or at least a more uniform, valuation of real estate, would come nearer ascertaining the true value of the wealth of our State, reduce the rate of taxation from fifty to one hundred per cent, furnish a potent and conclusive argument in favor of bringing wealth and population to our State, and take away all temptation to reduce values to save State taxation. It would also relieve county boards of the necessity of raising the value of each single tract of land in a township, for the purpose of protecting some townships against the wrongs of an intentional low assessment in another.

County boards have no authority now, under the law, to appropriate money out of the county Treasury for making or repairing roads. I have no special plan to suggest to remedy these defects of our road laws, but suggest that you give the matter serious attention, with a view of remedying the defects of the system, and securing better highways for the use of the public, in as economical and satisfactory a manner as possible. To this end I would recommend, however, that the Board of County Commissioners be authorized to levy a tax annually, not exceeding one mill on the dollar, to be used exclusively by the county board for the repair of, or grading roads, where public necessity may require such work to be done, as the means now provided by law are inadequate. There is no tax that could be levied that would be of so great a benefit to the farming interests, as one that could be used exclusively, in a prudent and economical manner, for the bettering of public highways, and none that will give a more immediate and beneficial return to the farmer for such a small expenditure.

The Governor also recommends an increase in the number of judicial districts, the appointment of a veterinary surgeon in connection with the Board of Agriculture, and an increase in the capacity of the insane asylums.

**RAILROADS.**—On the subject of railroads he says:

In addition to these oppressive discriminations against localities and individuals, these corporations have for ten years persistently defied the law in refusing to comply with the enactment requiring them to establish and keep their general offices within the State, but have moved them beyond our limits, and now even deny and defy the jurisdiction of our courts, thus violating the will of the people in this regard. And perhaps one of the worst features of this vexed railroad problem is the constant tendency on the part of railroad managers to manipulate the politics of the State; to seek not only to control conventions, to make platforms, to nominate and elect candidates, but also to improperly influence legislation by subsidizing and establishing newspapers, and by employing paid lobbyists to defeat proper legislation so that corporate greed may still override and oppress the people. Hitherto these wrongs have been borne patiently, and the people in their magnanimity have given the railroads every opportunity to prove themselves the real friends of the State, and for that reason have postponed legislative action, in the hope that these corporations would see the folly and injustice of their methods and adopt a wiser and more equitable policy. It seems, however, that forbearance on the part of the public has only emboldened these corporations to perpetrate still greater wrongs; for example, when it was ascertained that our wheat and corn crop of 1882 was a certainty, the railroads of the State at once advanced the rate of freight above the rate of last year, to such an extent as to place an additional burden upon the wheat and corn crops, amounting to over \$1,500,000, so that, as we increase the agricultural products of Kansas, the railroads adopt the unnatural policy of advancing their rates, thus preventing a good crop from returning any more money to the producer than a poor one.

Therefore I deem it my duty not only to call your attention to these evils, and to warn you of the danger of delay in dealing with them, but also to impress upon you the following propositions:

1. That railroads are public highways, created by the authority of the State, for the benefit of the State.
2. That railroads are common carriers, and as such shall receive and have the right to demand just and reasonable compensation for service rendered, and have no legal or equitable rights to charge excessive or exorbitant rates.
3. That all persons have a right to their use, on like conditions.
4. That the Legislature has the right and power to regulate them in all these respects and particulars mentioned, including the right to fix rates of freight and fare.

With these propositions in view it is clearly the duty of the law-making power to exercise a most thorough, fearless, and just management and control of its corporations, including telegraph and express companies, so as to prevent these valuable adjuncts of the business of the State from becoming oppressive monopolies. And should the Legislature, in its wisdom, deal with this important question as the public demand, and should it be decided that the railroads shall be placed under the control of a commission appointed for that purpose, I would fail in my duty to the State and to you did I not specially request that you shall fix by law, independent of any commission, the rate of passenger fare at three cents per mile, and that you provide by law, independent of any commission, that railroads shall be prohibited, under proper penalty, recoverable by civil action, from charging more for a short distance than for a long distance; that you shall fix by law, independent of any commission, a low but just and fair maximum rate of freight for coal, wheat, corn, oats, broom-corn, cattle, sheep, hogs, and lumber, so that no contingency of weather or combinations shall deprive the public of fuel at reasonable rates, or prevent the agriculturist and stock-raiser from getting his produce to market at reasonable rates and in the quickest time, so as to



give him the advantage of the best markets, and enable him to obtain a reasonable return from his labor and capital invested.

Railroads should not be permitted to increase their rates on any articles transported by them, until thirty days' notice posted in the station where the goods are received and delivered; and they should not be allowed to increase the rates on car-lots by excessive terminal charges, or for switching; and the rate per hundred pounds shall be specified in the shipping bill or receipt given for the article shipped, and the consignee should not be required to pay a greater rate than that named in the shipping bill or receipt.

The Union Pacific Railway Company, Kansas Division, received from the General Government, in the way of subsidies, six million acres of public lands, of which four million acres are in Kansas and two millions in Colorado. Notwithstanding this company came into possession of the lands over twelve years ago, it has neglected to take out patents, for the sole purpose, as is alleged, of evading taxation. On the first day of January, 1882, the total number of acres patented to this company by the Government was 883,772, leaving 3,116,228 acres of these lands still in the hands of the railroad company for all other purposes excepting taxation. These lands are to-day worth over \$13,000,000; and, at the rate of levy by the several counties on adjacent tracts, more than \$250,000 annually are thus withheld from the county and State Treasuries.

Efforts have been made by the State to obtain an act of Congress compelling the company to patent its lands.

**PROHIBITION.**—The Governor's observations on the prohibitory amendment are as follow:

At the session of the Legislature of 1879, a proposition to amend the Constitution of the State was adopted, to be submitted to the people at the general election, held November 2, 1880, in the following words: "The manufacture and sale of intoxicating liquors shall be forever prohibited in this State, except for medical, scientific, and mechanical purposes."

At the election in November, 1880, this proposed amendment to the Constitution was, by a majority of the votes cast upon that question, but not by a majority of the electors of the State, ratified, and became a part of the fundamental law of the State. The succeeding Legislature, in 1881, enacted a law whose provisions were intended to make the constitutional inhibition in respect to the traffic in intoxicating liquors effectual and operative.

The public policy embodied in this amendment and statute has been in force since their adoption, but during all that time this policy has been a failure, and injurious to the cause of genuine temperance, diverting immigration from our State, engendering strife in neighborhoods, promoting excessive litigation, loading down the dockets of the courts, making heavy cost bills to be paid by the people, inducing the clandestine use of intoxicating liquors in club-rooms and in the homes of the people, setting a frightful example of the use of intoxicating liquors before the young, drinking to excess caused by the purchase of liquors in quantities, and losing to the cause of temperance good and sincere temperance people by the meddlesome interference with the habits and established customs of long standing of many good and worthy citizens, by busy-bodies whose only ambition was to magnify their own importance, instead of working for real temperance.

It was premature, and indeed unfortunate, to have ingrafted into the fundamental law of the State a

policy which from its nature was an experiment of doubtful utility and of uncertain success, and which has proved a failure wherever tried in other States. Whatever mutations attend the ordinary statute law, it is of the first importance that the body of constitutional laws should be permanent and inflexible in its character.

During the last year of local option and license, the United States Revenue Office of Kansas issued 1,132 permits to sell intoxicating liquors, or one permit to 879 persons, placing Kansas as the first temperance State in the Union; while in the first year of prohibition there were issued 1,788 permits, an increase of 656, and also an increase of 58 per cent, or one permit to 551 persons, and taking Kansas from the first and ranking her the seventh temperance State, while in the first forty-five days of the second year of prohibition, 1,148 permits were issued, sixteen more than in the whole year of local option and license. If we consider these facts in connection with the clandestine sales of intoxicating liquors, and consider the vast amount that is daily delivered to individuals in concealed packages, by express companies, we are forced to the conclusion that the cause of true temperance reform has not progressed very rapidly under our present coercive system.

These, with other reasons that might be urged, constrain me to invite your attention to the necessity, or at least the policy and wisdom, of submitting to the people, in accordance with the provisions of the Constitution, a proposition to repeal the prohibition clause in the Constitution, and to amend the existing statute, with a view to rendering it less offensive to the people, and more effective in its operation. These views and suggestions are submitted in obedience to a public duty, rendered imperative by what I believe to be the wish of a large majority of the people who desire to overthrow true temperance, in lieu of the present free-liquor system.

**PARTY CONVENTIONS.**—The Republican State Convention met in Topeka, on the 10th of August, and made the following nominations for State officers: Governor, John P. St. John; Lieutenant-Governor, D. W. Finney; Secretary of State, James Smith; Auditor, E. P. McCabe; State Treasurer, Samuel T. Howe; Attorney-General, W. A. Johnston; Superintendent of Public Instruction, H. C. Speer; Associate Justice of Supreme Court, D. J. Brewer. Governor St. John was renominated by a vote of 287 to 76 for all others. Mr. McCabe is colored. The following is the platform adopted:

We, the Republicans of the State of Kansas in delegate convention assembled, affirming our faith in and adherence to the principles of the Republican party, hereby express confidence in our present national and State administrations, and we pledge ourselves to their support, and announce the following as our declaration of principles:

*Resolved*, That we declare ourselves unqualifiedly in favor of the prohibition of the manufacture and sale of intoxicating liquors as a beverage, and pledge ourselves to such additional legislation as shall secure the rigid enactment of the constitutional provision upon this subject, in all parts of the State.

*Resolved*, That we demand the enactment of such laws as will prevent unjust discrimination by railroad companies, and will provide for such freight and passenger tariff as shall fully protect the interests of the people.

That we are in favor of the strict and immediate enforcement of all laws now on the statute-book for the regulation of railways.

*Resolved*, That we request the Legislature of the State to submit to a vote of the women of the State the question of woman suffrage.



*Resolved*, That we request our delegation in Congress to secure such an amendment to the revenue laws as will prevent the issuing of receipts or stamps to sell intoxicating liquors to any persons other than those authorized so to do under State laws.

*Resolved*, That we ask of the Republican majority of the Congress of the United States to pass such laws as will compel the railways of this State to take patents for the lands granted them from the public domain, to the end that all property in this State shall pay its just proportion of the taxes levied to support the government.

*Resolved*, That the Republicans of Kansas heartily indorse President Arthur's veto of the extravagant River and Harbor Bill, and the action of the united Kansas delegation in sustaining that veto.

By other conventions the following nominations were made for Representatives in Congress: First District, John A. Anderson; Second District, D. C. Haskell; Third District, Thomas Ryan; at large, S. R. Peters; at large, E. N. Morrill; at large, Louis Hancock; at large, B. W. Perkins.

The Greenback State Convention met in Topeka, on the 22d of August, and made the following nominations: For Governor, Charles Robinson; Lieutenant-Governor, J. G. Bayne; Secretary of State, A. P. Elder; Auditor, W. A. Garretson; Treasurer, J. H. Ludlow; Attorney-General, J. D. McBryan; Superintendent of Public Instruction, J. S. Whitman; Associate Justice of Supreme Court, L. C. Uhl; Congressmen-at-large, H. L. Phillips, S. N. Wood, John Davis, and Allen Williams (colored).

The Democratic State Convention met in Emporia, on the 30th of August, and nominated the following ticket: Governor, George W. Glick, of Atchison; Lieutenant-Governor, Frank Bacon, of Neosho County; State Treasurer, Charles E. Gifford, of Clay Center; Auditor of State, W. E. Brown, of Rice County; Attorney-General, — Moore; State Superintendent, D. E. Lantz, of Riley County.

The following were nominated for Congressmen-at-large: C. A. Leland, of El Dorado; John C. O'Flanagan, of Pottawattamie.

The platform adopted is substantially as follows:

The Democratic party of the State of Kansas, in convention assembled, recognizing the people as the source of all political power, and the Constitutions of the United States and the State of Kansas as the fundamental laws of the land, and that the chief object and end of government is to protect and defend its citizens in the enjoyment of life, liberty, and property, does declare its political faith and purposes. . . .

2. We will defend and ever maintain the doctrine of equal rights to all and special privileges to none, the protection of the weak against the strong, equal and just taxation, free speech, free press, free schools, and a free, uninterrupted ballot fairly given and honestly counted, freedom for all men and women of every race, creed, and color, and a perpetual and absolute separation of Church and State.

3. We demand a revision of the present unjust tariff laws of the United States: no kind of industry should be fostered by the Government to the injury of another; no class of men should be taxed directly or indirectly for the comfort, convenience, or interest of another; that every description of industry should stand or fall upon its own merits, and we especially

demand that agricultural pursuits and productions be encouraged and made free from all unjust discrimination in favor of gluttonous and selfish corporations.

4. We maintain that the State has and must retain the power to control and regulate the right and duties of all corporations created by it, and we demand that the Legislature exercise this power so as to protect the people against unjust discrimination and exorbitant charges for the transportation of freight and passengers by railroad corporations, and we particularly demand the enactment of such laws as will compel all corporations existing by the favor of the laws of this State to keep and maintain their general offices within the State. . . .

7. We demand that the relations between capital and labor be so adjusted by wise and just legislation as to secure to each its just rights, and at the same time to make it impossible for avarice and greed to override and imperil the rights, interest, personal freedom and independence of working-men; and we demand that every law, combination, and policy that is unjust and too onerous upon those engaged in manual labor be removed and utterly destroyed. . . .

9. We demand an immediate reduction of taxes, Federal, State, and municipal, to the lowest rate sufficient to meet all public dues and obligations. So long as the people are burdened with debt, the industries of the country suspended by labor-strikes, and thousands of men out of employment by reason of the tyranny, avarice, and cupidity of exacting and oppressive monopolies, it is neither right nor just to collect money from the people to be squandered by an incompetent, reckless, and corrupt Congress in the pretended improvement of stream-harbors and waterless rivers; and we further demand that the surplus money in the Treasury be applied in payment of our national debt.

10. We demand that the Congress of the United States propose and submit to the States for their action such amendments to our Federal Constitution as will accomplish the following objects: 1. The election of a President and Vice-President by a direct vote of the people. 2. The extension of the term of office of President and Vice-President to six years, and making the President ineligible for a second term. 3. The election of United States Senators by a direct vote of the people of the United States respectively. 4. Fixing the term of offices of Senators the same as the presidential term, and of Representatives in Congress at four years. 5. The election of postmaster by a direct vote of the people of the city, town, or district in which the office is located. 6. Biennial sessions of Congress. 7. The election for all Federal officers to be under the control of the Federal Government, and to be held at a time other than the time of holding State elections. . . .

12. We demand the enactment of additional and more stringent laws, both Federal and State, for the punishment of bribery and corruption in office, and to secure the purity of elections, general, special, and primary.

13. That we are opposed to monopolies of all kinds, believing them to be at war with the best interests of the country, imperiling its power, prosperity, and security, and contrary to the genius and spirit of free institutions. . . .

15. We are opposed to national banks, and insist that gold, silver, and a greenback currency shall be the only money of the country.

George W. Glick was born on the 4th of July, 1827, at Greencastle, Fairfield County, Ohio. The early years of his life were spent on a farm. He acquired a fair English education, and some knowledge of the higher mathematics, and the languages. He read law in the law-office of Messrs. Buckland & Hayes, the latter being afterward the President of the United States. Mr. Glick early took an active part in politics. In 1858 he was nominated

by the Democratic Convention of his district for Congress, but declined the nomination. He was nominated the same year as the Democratic candidate for the State Senate, and ran against his preceptor, Mr. Buckland, being defeated, but running nearly 2,000 votes ahead of his ticket. He was elected Judge Advocate of the Second Regiment of the Seventeenth Division of the Ohio militia, with the rank of colonel, and was commissioned by Governor Chase.

He removed to Kansas in the spring of 1859, located at Atchison, and resumed the practice of law. In 1874 Mr. Glick relinquished a lucrative practice on account of a severe throat affection, giving his entire attention from that date to the management of his fine farm, when not filling a public position. He served nine terms in the Kansas Legislature—oftener than any other citizen of the State. During five sessions of the House he was chairman of the Judiciary Committee. In 1868 he was the Democratic candidate for Governor, and ran 1,600 votes ahead of the Democratic candidate for President.

**ELECTION RETURNS.**—The election in November resulted in the choice of the Democratic candidate for Governor, while the other State officers and the Congressmen elected are Republicans. The defeat of Governor St. John was due to his pronounced views in favor of prohibition. The vote was as follows:

#### CONGRESSMEN-AT-LARGE.

Peters.....	99,866
Morrill.....	98,849
Hanback.....	97,854
Perkins.....	98,338
Wood.....	98,079
Leland.....	59,872
O'Flanagan.....	53,864
Phillips.....	25,644
Williams.....	22,243
Davis.....	26,701

#### FIRST CONGRESSIONAL DISTRICT.

Anderson.....	41,251
Moody.....	17,816

#### SECOND CONGRESSIONAL DISTRICT.

Haskell.....	23,601
Acers.....	19,116
Taylor.....	5,710

#### THIRD CONGRESSIONAL DISTRICT.

Ryan.....	36,131
Cannon.....	17,729
Cole.....	9,865

#### STATE TICKET—GOVERNOR.

St. John.....	75,158
Glick.....	93,239
Robinson.....	20,933

#### LIEUTENANT-GOVERNOR.

Finney.....	98,166
Bacon.....	61,547
Bayne.....	23,800

#### SECRETARY OF STATE.

Smith.....	99,232
Gilbert.....	60,471
Elder.....	23,422

#### AUDITOR.

McCabe.....	86,160
Brown.....	66,130
Garretson.....	24,603

#### STATE TREASURER.

Howe.....	99,067
Gifford.....	60,553
Ludlow.....	23,307

#### ATTORNEY-GENERAL.

Johnston.....	99,177
Moore.....	57,026
McBryan.....	23,014

#### SUPERINTENDENT OF PUBLIC INSTRUCTION.

Speer.....	99,269
Lantz.....	60,230
Whitman.....	23,805

#### ASSOCIATE JUSTICE.

Brewer.....	98,806
Green.....	60,671
Uhl.....	21,146

The Legislature chosen at this election will consist of 37 Republicans, 2 Democrats, and 1 Greenbacker in the Senate, and of 86 Republicans, 26 Democrats, and 13 Greenbackers in the House.

**MISCELLANEOUS.**—A convention of colored voters was held in Topeka in June, which passed resolutions claiming recognition from the Republican party in nominations for office. During the year the Supreme Court decided that the prohibition act, so far as it provides a punishment for drunkenness, is unconstitutional, on the ground that the title of the act only purports to provide for the manufacture and sale of liquor, and not for intoxication. This renders the section void under the clause in the Constitution which provides that the subject of the law must be expressed in the title.

**KENTUCKY. STATE GOVERNMENT.**—The State officers during the year were as follows: Governor, Luke P. Blackburn, Democrat; Lieutenant-Governor, James E. Cantwell; Secretary of State, James Blackburn; Treasurer, James W. Tate; Auditor, Fayette Hewitt; Adjutant-General, Joseph P. Nuckols; Superintendent of Public Instruction, J. D. Pickett; Attorney-General, W. P. Hardin; Register of Land-Office, Ralph Sheldon; Commissioner of Agriculture, Charles E. Bowman; Insurance Commissioner, L. C. Norman; State Librarian, Mrs. Anna B. Cook. Judiciary, Court of Appeals: Chief-Justice, Joseph H. Lewis; Associate Justices, T. F. Hargis, Thomas H. Hines, and William S. Pryor.

**LEGISLATIVE ACTS.**—The Legislature, which was in session at the beginning of the year, adjourned on the 24th of April, after a session of one hundred and forty-eight days. Among the acts passed are the following:

An act to prescribe the mode of condemning land for the use of railroad and turnpike companies; an act providing that the stated biennial sessions of the Legislature shall hereafter begin on the 30th of December, or the day following, if that be Sunday; an act prescribing that the fiscal year shall hereafter end on the 30th of June; an act to amend an act to establish a State Board of Health, to provide for the appointment of local boards of health and superintendent, and acts amendatory thereof; an act to require railroad companies to post notices of delays in passenger trains; an act to apportion the State into eleven congressional districts, as follow:

First District, composed of the counties of Fulton, Hickman, Graves, Ballard, McCracken, Marshall, Cal-



Ioway, Trigg, Lyon, Livingston, Crittenden, and Caldwell.

Second District, of the counties of Christian, Hopkins, Webster, Union, Henderson, McLean, Daviess, and Hancock.

Third District, of the counties of Muhlenberg, Todd, Logan, Butler, Edmonson, Warren, Simpson, Allen, Monroe, Cumberland, and Clinton.

Fourth District, of the counties of Ohio, Grayson, Breckenridge, Meade, Hardin, Bullitt, Nelson, Larue, Marion, and Washington.

Fifth District, of the county of Jefferson.

Sixth District, of the counties of Trimble, Carroll, Gallatin, Grant, Boone, Kenton, Campbell, and Pendleton.

Seventh District, of the counties of Oldham, Henry, Owen, Franklin, Scott, Harrison, Bourbon, Fayette, and Woodford.

Eighth District, of the counties of Shelby, Spencer, Anderson, Mercer, Boyle, Lincoln, Garrard, Jessamine, Madison, Rockcastle, Jackson, Owsley, and Laurel.

Ninth District, of the counties of Bracken, Mason, Robertson, Nicholas, Fleming, Bath, Rowan, Lewis, Greenup, Carter, Boyd, Lawrence, Johnson, and Martin.

Tenth District, of the counties of Pike, Letcher, Floyd, Magoffin, Morgan, Elliott, Menifee, Wolfe, Powell, Montgomery, Clark, Estill, Lee, Breathitt, Perry, Clay, Leslie, Knox, Bell, and Harlan.

Eleventh District, of the counties of Whitley, Wayne, Pulaski, Casey, Russell, Adair, Taylor, Green, Metcalfe, Barren, and Hart.

An act was also passed establishing a Superior Court, to be held in Frankfort. The principal features of this act appear in the following extracts:

SECTION 1. *Be it enacted by the General Assembly of the Commonwealth of Kentucky*, That there is hereby established a court of justice for the Commonwealth of Kentucky, known as the Superior Court, to consist of three judges, who shall have the same qualifications as are now required by law for judges of the Court of Appeals. Any two of them may constitute a court for the transaction of business. On the first Monday in August, 1882, there shall be elected by the qualified voters of this Commonwealth three persons, qualified as aforesaid, as judges of said court, whose term of office shall commence on the first Monday in September, 1882, and continue until the first Monday in September, 1886. They shall determine by lot who shall be the presiding judge. The State shall be divided into three Superior Court districts, and one judge of said court shall be elected from each of said districts by the qualified voters thereof.

SEC. 2. The Superior Court shall have exclusive appellate jurisdiction over the final orders and judgments of all other courts of this Commonwealth that the Court of Appeals now has, except as provided in this act; and all the laws now in force in regard to appeals to the Court of Appeals, and the trial thereof, shall be applicable to appeals to the Superior Court, unless otherwise provided in this act.

SEC. 3. The Superior Court shall not have appellate jurisdiction of any appeal where there is involved (1) the validity of a statute; (2) the title to a freehold or right to a franchise; (3) nor in cases of felony, (4) the probate of a will, (5) judgments for money or personal property, if the value in controversy be greater than \$3,000, exclusive of interest and cost; and the said court shall have the original jurisdiction in fiscal cases heretofore vested in the Franklin Circuit Court by Article IX of chapter 28 of the General Statutes, and so much of said chapter as vested said jurisdiction in the Franklin Circuit Court is hereby repealed, and the terms of said Superior Court for the hearing of fiscal cases shall be as provided for the Franklin Circuit Court in said chapter.

SEC. 5. The Court of Appeals shall have appellate

jurisdiction over the final orders and judgments of the Superior Court in all cases except the following: 1. Those for fines, or for the recovery of money or personal property, where the amount of the fine, or the value in controversy, is less than \$1,000, exclusive of interest and costs. 2. Those where the judgments of the lower court have been affirmed by the Superior Court without a dissenting vote; but if, in any case coming within either of the above exceptions, any two of the judges of the Superior Court shall certify that, in their opinion, the question involved is novel, and is one of sufficient importance, the party against whom the decision was rendered shall be entitled to take the same by appeal to the Court of Appeals, as in other cases.

SEC. 17. The judges of the Superior Court shall each receive an annual salary of three thousand six hundred dollars, to be paid monthly out of the Treasury.

SEC. 22. The Superior Court shall have original jurisdiction of escheats; and all acts, or parts of acts, inconsistent with this section, are hereby repealed.

The three judges were subsequently duly elected, and the court was organized, Judge Bowden becoming the presiding judge.

Another act is entitled "An act to prevent extortion and discrimination in the transportation of freight and passengers by railroad corporations, and, in aid of that purpose, to establish a Board of Railroad Commissioners, and define its powers and duties."

The following are the chief provisions of this important act:

SECTION 1. *Be it enacted by the General Assembly of the Commonwealth of Kentucky*, If any railroad corporation shall willfully charge, collect, or receive more than a just and reasonable rate of toll or compensation for the transportation of passengers or freight in this State, or for the use of any railroad-car upon its track, or upon any track of which it has control or the right to use in this State, it shall be guilty of extortion, and, upon conviction, shall be punished as prescribed by this act.

SEC. 2. If any railroad corporation shall willfully charge, collect, or receive from any person or persons, for the transportation of any freight upon its railroad, a higher or greater rate of toll or compensation than it shall at the same time charge, collect, or receive from any other person or persons for the transportation of the like quantity of freight of the same class, being transported from the same point, in the same direction, over equal distances of the same railroad, or if it shall charge, collect, or receive from any person or persons, for the use and transportation of any railroad car or cars upon its railroad, a higher or greater sum than it shall at the same time charge, collect, or receive from any other person or persons for the use or transportation of a car or cars of the same class for a like purpose, from the same point, in the same direction, and an equal distance; all such discriminating rates, charges, or collections, whether made directly or by means of any rebate, or other shift or evasion, shall be considered and taken as *prima facie* evidence of discrimination, which is hereby prohibited and declared unlawful, and shall be punished as prescribed by this act. When one or more car-loads of freight shall be transported at the same time for different persons, and for each shipper a car-load or more, such shipments shall be considered and taken as the same quantity of freight within the meaning of this act; and when less than a car-load of freight, and over five thousand pounds, are transported at the same time for different shippers, and for each shipper over five thousand pounds, such shipments shall be considered and taken as the same quantity of freight; and when over five hundred pounds, and less than five thousand pounds, are transported at the same time for different



shippers, and for each shipper said quantity of freight, such shipments shall be considered and taken as the same quantity of freight.

SEC. 3. Nothing contained in this act shall be construed to prohibit railroad corporations from issuing commutation, excursion, or thousand-mile tickets, as are now issued, nor as controlling the rates of freight which come from and go beyond the boundaries of the State, nor as excluding other evidence of extortion or unlawful discrimination.

SEC. 4. Any railroad corporation that shall be guilty of extortion or unlawful discrimination shall, upon conviction, be fined, for the first offense, in any sum not less than one hundred dollars, nor more than one thousand dollars; and, upon a second conviction, in any sum not less than five hundred dollars, nor more than two thousand dollars; and, upon a third conviction, in any sum not less than two thousand dollars, nor more than five thousand dollars. The circuit court, or court of similar jurisdiction, of any county into or through which the line of railroad may run owned by the corporation alleged to be guilty as aforesaid, shall have jurisdiction of the offense, which shall be prosecuted by indictment or by action in the name of the Commonwealth, upon information filed by the Board of Railroad Commissioners; and, in all prosecutions and actions against railroad corporations under this act, a preponderance of the evidence shall govern and control the jury in making their verdict. And such railroad corporation shall also be liable in damages to the party aggrieved to three times the amount of the damages sustained, together with costs of suit and a reasonable attorney's fee, to be fixed by the court.

SEC. 5. The Governor, during the present session of the General Assembly, shall, by and with the advice and consent of the Senate, appoint three competent persons as commissioners, who shall constitute a Board of Railroad Commissioners, who shall hold their offices until the next meeting of the General Assembly, and until their successors are appointed and qualified. At the next meeting of the General Assembly, and every two years thereafter, the Governor, by and with the advice and consent of the Senate, shall appoint three competent persons as such commissioners, who shall hold their offices for the term of two years from the first Monday in the year of their appointment, and until their successors are appointed and qualified. For the purposes of this act, the State shall be divided into three districts, to be called the Eastern, the Middle, and the Western Districts, and the Governor shall appoint one commissioner from each district, who shall now be, and shall continue to be during his term of office, a resident of the district from which he is appointed.

SEC. 6. No person shall be appointed as such commissioner who is under twenty-five years of age, or who is directly or indirectly interested in any stock, bond, or other property of, or is in the employment of any railroad company; and no person appointed as such commissioner shall, during the term of his office, become interested in any stock, bond, or other property of any railroad company, or be employed by any railroad company. The Governor shall have power to fill vacancies in the office of any such commissioner until the meeting of the Senate.

SEC. 8. Each of said commissioners shall receive for his services the sum of not exceeding two thousand dollars per annum, payable quarterly; they shall be furnished with an office, furniture, and stationery at the expense of the State. The total sum to be expended by said commissioners for office-rent, furniture, and stationery shall not exceed eight hundred dollars per annum. The office of said commissioners shall be kept at Frankfort.

SEC. 9. Every railroad company shall, on or before the first day of September in each year, make and transmit to the commissioners, at their office in Frankfort, under oath of the proper officers of the corporation, a full and true statement of the affairs

of said corporation as the same existed on the first day of the preceding July, specifying:

1. The amount of capital stock paid up, and the names of the owners thereof, and the amounts owned by each, and the residence of each stockholder as far as known.

2. The amount of its assets and liabilities.

3. The names and place of residence of its general officers.

4. The amount of cash paid to the company on account of the original capital stock.

5. The amount of funded debt.

6. The amount of floating debt.

7. The estimated value of the road-bed, including iron and bridges.

8. The estimated value of rolling-stock.

9. The estimated value of stations, buildings, and fixtures.

10. The estimated value of other property.

11. The length of single main track.

12. The length of double main track.

13. The length of branches, stating length of single and of double track.

14. The aggregate length of siding and other tracks not above enumerated.

15. The number of miles run by passenger trains during the year preceding the making of the report.

16. The number of miles run by freight trains during the same period.

17. The number of tons of through freight carried, and the number of tons of local freight during the same time.

18. The monthly earnings for the transportation of passengers during the same time.

19. The monthly earnings for the transportation of freight during the same time.

20. The monthly earnings from all other sources respectively.

21. The amount of expenses incurred in running of passenger trains during the same time.

22. The expense incurred in running freight trains and in running mixed trains during the same time.

23. All other expenses incurred in the management of the road, including the salaries of officers, which shall be reported separately.

24. The amount expended for repairs of road and maintenance of way, including repairs and renewals of bridges and renewals of iron.

25. The amount expended for improvements, and whether the same are estimated as a part of the expenses of operating or repairing the road, and if either, which?

26. The amount expended for motive power and cars.

27. The amount expended for station-houses, buildings, and fixtures.

28. All other expenses for maintenance of way.

29. All other expenses for other purposes.

30. The rate of fare for passengers for each month for the same time, through and way passengers separately.

31. The tariff of freights, showing each change of tariff during the same time, and a copy of each published rate for passengers and freight issued to its agents during the same time, and whether the published rates were those actually received; if not, what were received.

32. The number of tons of freight carried one mile.

33. The amount received per ton per mile.

34. The average distance each ton was hauled, and the average cost of hauling a ton of freight one mile.

35. What freight and transportation companies run on its road, and on what terms, and whether such transportation companies use the cars of the railroad company, or cars furnished by themselves.

36. Whether the freight or cars of such transportation companies are given any preference in speed or order of transportation; and if so, in what particular?

SEC. 10. The said commissioners may propound any additional interrogatories, which shall be answered by



such companies in the same manner as those specified in the foregoing section.

Sec. 11. Said commissioners shall, on or before the first day of December in each year, and oftener if required by the Governor to do so, make a report to the Governor of their doings for the preceding year, containing such facts as will disclose the practical workings of the system of railroad transportation in this State, and such suggestions in relation thereto as to them may seem appropriate.

Sec. 12. Said commissioners shall examine into the condition, management, and all other matters concerning the business of railroads in this State, so far as the same pertain to the relation of such railroads to the public; and whether such railroad corporations, their officers, and employes, comply with the laws of this State. And whenever it shall come to their knowledge, or they shall have reason to believe that the laws affecting railroad corporations in their business relations to the public have been violated, they shall prosecute, or cause to be prosecuted, the corporations or persons guilty of such violation.

Sec. 13. Said commissioners shall have power to examine, under oath, the directors, officers, agents, and employes of any railroad corporation concerning the management of its affairs, and to obtain information pursuant to this act; and shall have power to issue subpoenas for the attendance of witnesses, and to administer oaths. In case any person shall willfully refuse or fail to obey such subpoena, it shall be the duty of the circuit court, or any court of similar jurisdiction of the county, upon application of said commissioners, to issue an attachment for such witnessess and compel them to attend before the commissioner, and give testimony upon such matters as may be lawfully required of them, and may punish for contempt as in other cases.

Sec. 15. Every corporation, and every officer or agent that shall willfully neglect or refuse to make any report required in this act at the time herein required, or who shall intentionally hinder and obstruct said commissioners in the discharge of the duties hereby imposed upon them, shall be fined in the sum of not less than fifty nor more than one hundred dollars, to be recovered upon an indictment, or by an action in the name of the Commonwealth, to be instituted by said commissioners.

Sec. 17. This act shall not apply to any street railroad.

Sec. 18. The term railroad corporation, as used in this act, shall be construed to include any person, association, or company operating a railroad, whether incorporated or not. And any association, company, or corporation extorted upon, or discriminated against, shall be included in the term person, as used in this act.

Sec. 19. Said commissioners shall hear and determine complaints under the first and second sections of this act. Such complaints shall be made to said commissioners in writing, and they shall give the company complained of not less than ten days' notice of the time and place of hearing the same. They shall hear the evidence of the parties, and award judgment as authorized by this act. Unless the same be satisfied, the chairman shall, within ten days, file a copy of said award in the office of the clerk of the circuit court of the county which, under the Code of Practice, would have jurisdiction of such controversy, on which execution shall issue as on other judgments: *Provided*, That any party dissatisfied with said award may, within ten days, file a traverse thereof with the clerk of said court, who shall docket the same for trial at the next term. If the matter in controversy shall exceed twenty dollars, said court, on demand of either party, shall impanel a jury to try the same. If it does not exceed that sum, the court shall hear and summarily decide the same without the intervention of a jury.

D. Howard Smith, W. B. Machen, and W. M. Beckner, were appointed commissioners

under this act, and the board was organized in May.

Acts were also passed repealing the capitation tax of one dollar on each male colored person above the age of twenty-one years; providing for the assessment and collection of a tax upon distilled spirits; providing for taking the sense of the people at the next general election for representatives, as to the propriety of calling a convention to revise the Constitution.

A joint committee from the Senate and House was created during the session to visit the convicts leased to contractors and worked without the walls of the Penitentiary, to investigate their treatment and management, and to ascertain whether or not they were clothed and dieted, and given medical attention, guarded, housed, and worked as required by law.

They made a report of which the following is the concluding portion: "We unhesitatingly recommend an immediate repeal of the law establishing the leasing system; that the contracts with the lessees, violated in every particular, be immediately annulled, and the convicts withdrawn."

STATISTICS.—The Auditor's report shows: That 8,772 sheep, valued at \$21,080, were killed by dogs in 1881. That there were 461,226 hogs over six months old, a decrease of 222,851 as compared with 1880. That there were 308,492 white voters in 1881, and 51,776 negro voters; the former being an increase of 1,638, and the latter a decrease of 4,869, since 1880. That the average valuation of property assessed to each male over twenty-one years of age was \$940.50 in 1880, and \$741.25 in 1881, being a decrease of \$199.25. That there were 412,028 white school-children between six and twenty years of age, and 47,924 colored in 1880, but only 406,095 white and 44,930 colored in 1881. That Christian County raises the most corn, and Madison next, while Bourbon, Boyle, Fayette, Jackson, Johnson, Mercer, and Oldham raised none either in 1880 or 1881.

The assessed value of railroad property in 1882 was \$34,171,857; miles assessed, 1,675.

One hundred and two insurance companies were doing business in the State at the beginning of 1881. Of this number ninety-two were fire and ten life insurance companies.

The paid-up capital of the fire companies, including \$200,000 deposit of each of the foreign companies, was \$47,707,200, being an increase, as compared with the previous year, of \$6,399,990. The risks written in the State during the year 1881 amounted to \$128,208,661. Total premiums received by the companies, \$1,558,957.94. Total losses paid, \$654,528.50, showing net receipts of companies of \$904,529.44. The business of fire insurance shows a large increase during the year.

The ten life companies held at the beginning of the year on lives of citizens of the State, 11,152 policies, insuring \$28,766,383. At the end of the year there were in force 11,820



policies, insuring \$30,231,199. The premiums received by the companies amounted to \$811,397.11, and losses and claims paid to \$441,622.18.

The taxes paid to the State amounted to \$14,172.89, and the expenses of the Insurance Bureau were \$9,761.82, leaving a surplus of \$4,555.98 placed to the credit of the State revenue.

The amount of whisky produced annually in Kentucky since 1862 is as follows:

YEAR.	Gallons.	YEAR.	Gallons.
1863.....	857,789	1874.....	6,982,709
1864.....	472,092	1875.....	9,399,338
1865.....	832,272	1876.....	6,245,717
1866.....	513,720	1877.....	7,889,151
1867.....	514,400	1878.....	6,371,965
1868.....	403,568	1879.....	8,111,731
1869.....	7,018,306	1880.....	15,011,279
1870.....	11,082,082	1881.....	31,869,047
1871.....	5,870,002	1882.....	30,386,456
1872.....	5,203,071		
1873.....	5,244,668	Total.....	150,280,258

The State Commissioner of Agriculture gives the following statement of crops for 1882:

	Acreage.	Bushels.
Wheat.....	1,436,705	17,156,646
Oats.....	305,974	5,498,740
Rye.....	251,667	3,118,669
Hay (tons).....		664,336
Grass (acres).....		2,773,043
Corn.....	2,875,041	60,913,238

The valuable deposits of coking coals, which have added such wealth to Pennsylvania and West Virginia, have been traced and identified in the valleys of the Cumberland, the Kentucky, and the Big Sandy, of a thickness of seven or eight feet.

The report of the Superintendent of Public Instruction shows that in the white department, at the close of the year ending June 30, 1880, there were 6,177 school districts, an increase over the previous year of 109 districts. In these there were 6,136 schools taught, an increase over the previous year of 101 schools.

The number of children enrolled in census reports for that year was 478,554, an increase over the previous year of 1,684. The highest number attending school was 245,358. There was a difference of 66,526 between the census of children as reported to the superintendent, and the census as taken by assessors and reported to the auditor, the former being that much in excess of the latter. The total average per capita for that year from all sources was \$2.08+.

In the same department for the year ending June 30, 1881, the number of school districts was 6,244, a gain of sixty-nine districts. The number of districts in which schools were taught was 6,189, a gain of fifty-three. The number of children enrolled that year was 483,404, a gain over the previous year of 4,850. The highest attendance reported was 238,440, showing a decrease of 6,918. The difference between the number of children reported to the superintendent and that reported to the auditor for the year was 79,957. The total

average per capita for that year was \$2.24+, an increase of 0.16+.

In the colored department for the year ending June 30, 1881, the number of school districts was 804, an increase over the previous year of thirty-one districts. The number of schools taught was 718, an increase of twenty-one over the previous year. The number of children enrolled was 70,234, an increase of 3,670 over the previous year. The average attendance is not given. The per capita for these years was 58 cents, an increase over the previous year of 10 cents.

**POLITICAL AND TEMPERANCE CONVENTIONS.**  
—The Democratic State Convention met in Frankfort on the 11th of January, and nominated for Clerk of the Court of Appeals, Captain Thomas J. Henry, of Morgan County. The following is the platform adopted:

1. The Democracy of Kentucky, in State Convention assembled, reassert their devotion to the principles of the party, national and State, as enunciated in the platforms promulgated by the last National Convention held at Cincinnati, and the State Convention at Louisville, and relying on the intelligence, justice, and patriotism of the people, fearlessly appeal for the continuance of their support.

2. That the recent interference of the Federal Administration in the local politics of the States, and the efforts, by the dispensation of its patronage, to manipulate and control State elections, are deserving of the severest denunciation. We declare such practices to be in the highest degree degrading to the civil service, obstructive to reform, and dangerous to the liberties of the people.

The nominee had been a Confederate officer, and his nomination intensified a feeling which had been some time growing among the Democrats of the State who were supporters of the Union during the war that the organization of that party was in the hands of Confederates, and was used to ostracize Unionists. Colonel R. T. Jacob was placed in nomination by the dissatisfied element, and was supported by the Republicans. Captain Henry encountered further opposition from an indiscretion committed early in the canvass.

A Temperance Convention of the ministers of Kentucky was held in Lexington on the 15th of February and the following days, which adopted the following resolutions:

*Resolved*, That while we give our vigorous support to all just means and efforts to suppress intemperance, even when these means and these efforts are imperfect, yet we believe that the only righteous and logical and only thoroughly effectual end to be aimed at is the prohibition by law, State and Federal, of the manufacture and sale of intoxicating liquors for the purpose of drinking; and that we will in all our efforts always keep this final aim in view.

*Resolved*, That we regard as a most efficient means of success, in the war against the great evil we are combating, the abundant dissemination of approved temperance literature, and the delivering of lectures, in order thus to enlighten and direct the public mind and awaken and stimulate the conscience of the people.

*Resolved*, That it is the opinion of this convention that the liquor-traffic in its results is subversive of the great purposes of the Church, and should not be tolerated by the churches in their members.



A meeting of Prohibitionists was also held later in the year, in Louisville, which adopted the following resolutions:

*Resolved*, That we deem it expedient that a State Convention be called for the purpose of nominating a State ticket representing the principles of the Prohibition party, and that we recommend said mass-convention to be held in the city of Louisville on February 19, 1883, at 12 m.

*Resolved*, That this Conference earnestly and cordially invite the people of Kentucky favoring the prohibition of the liquor-traffic, irrespective of all political sentiments and affiliations, to attend this convention, and that each county be urged to send a delegation.

**ELECTION RETURNS.**—The election on the 7th of August resulted in the choice of Captain Henry, the vote being as follows: Henry, 115,681; Jacob, 75,464; Alexander Lush, 4,392. The act providing for an additional tax for the common schools was ratified by the following vote: for, 114,324; against, 97,636. For Judge of the Court of Appeals in the Third Appellate District, Joseph H. Lewis received 26,715 votes and W. E. Russell 19,709. For Judges of the Superior Court the following were elected: First District, J. H. Bowden, by a vote of 43,721, against 218; Second District, A. E. Richards, by 48,411 votes; Third District, Richard Reid, by 52,222 votes. In November, Republican Congressmen were elected in the Ninth and Tenth Districts, an Independent Democrat in the First, and Democrats in the other eight. The following are the returns by districts:

FIRST DISTRICT.	
Oscar Turner, Independent Democrat.....	3,705
J. R. Grace, Democrat.....	7,627
H. H. Houston, Republican.....	5,903
SECOND DISTRICT.	
J. F. Clay, Democrat.....	5,747
Others.....	2,380
THIRD DISTRICT.	
J. G. Halsell, Democrat.....	13,546
W. G. Hunter, Republican.....	13,356
FOURTH DISTRICT.	
T. A. Robertson, Democrat.....	5,873
W. H. Parrish, —.....	1,964
FIFTH DISTRICT.	
A. S. Willis, Democrat.....	6,492
Silas Miller, Republican.....	3,557
J. M. Hunter, Prohibition.....	385

## SIXTH DISTRICT.

John G. Carlisle, Democrat..... 4,990

## SEVENTH DISTRICT.

J. C. S. Blackburn, Democrat..... 11,789  
J. W. Asbury, Republican..... 6,651

## EIGHTH DISTRICT.

P. B. Thompson, Jr., Democrat..... 11,902  
E. L. Ewell, Republican..... 10,885

## NINTH DISTRICT.

W. W. Culbertson, Republican..... 11,217  
J. Smith Hartt, Democrat..... 9,948

## TENTH DISTRICT.

John D. White, Republican..... 14,240  
G. M. Adams, Democrat..... 12,890

## ELEVENTH DISTRICT.

Frank Wolford, Democrat..... 11,999  
D. R. Carr, Republican..... 9,984

**MISCELLANEOUS.**—A crime committed in Boyd County created great local excitement, and attempts were made to lynch the supposed culprits, Neal and Craft. The local authorities became incompetent to protect the prisoners, and Judge Brown called upon the Governor for troops to protect the court and prisoners during the hearing of an application for a change of venue, to take place before him at Catlettsburg on the 31st of October. Troops were furnished, commanded by Major John R. Allen. The place of trial was changed to Carter County, and the prisoners were directed by the judge to be taken by the troops to Lexington, for safe keeping until the trial. The troops were threatened while embarking on a steamer with the prisoners, by a mob from Ashland, and, while passing down the river, were attacked at that point by members of the mob from a ferry-boat, who fired upon them, wounding several. The troops returned the fire, killing some on the ferry-boat and on the wharves. After this the prisoners were taken to Lexington without opposition.

On Saturday, August 19th, the one hundredth anniversary of the battle of Blue Licks was celebrated on the battle-field with appropriate and numerous attended ceremonies.

## L

**LABOR, MOVEMENTS AND AGITATIONS OF.** The partial failure of the crops in the United States in 1881 was followed in the spring of 1882 by an increase in the price of all kinds of provisions. This bore heavily upon the working-men of all trades, whose wages had been adjusted to the lower market rates of good seasons; at the same time employers were not disposed to grant any advance in wages, for they were all feeling the burden of a depression resultant upon a diminished demand for their goods, and were anticipating further declines in the markets. The situation created great discontent among the working-men, which found expression in combined de-

mands for increased wages, and, when these were refused, in strikes. Numerous establishments in the different manufacturing centers were individually affected by these strikes for a longer or shorter time. In many instances the strikes were met by combinations of employers and lock-outs. In a few instances these deadlocks occurred on so extensive a scale that they prostrated a whole line of business, as in the strike of the iron-workers of the West, or, like that strike, and the strike of the freight-handlers of the railroads terminating in New York city, affected very large districts of the country.

**THE KNIGHTS OF LABOR.**—A new element of

strength has been given to movements of this kind in recent years by the appearance as a directing and supporting force of the society called the Knights of Labor, which has become one of the most important and effective organizations of working-men in the United States. It has grown up out of a secret protective union of garment-cutters, that was formed in Philadelphia in 1869, at the instigation of Mr. Uriah S. Stevens. The principles of the organization were extended in 1878 to the other trades of the city; and two years afterward the strength of the local assemblies of Philadelphia having increased to fifteen thousand members, a district assembly, composed of delegates from the local unions, was organized. An extension of the organization to other cities and States was begun at about this time; and in 1878, several hundred local assemblies having been formed, a general assembly was constituted as the legislative body for the entire order. At a meeting of the delegates from fifteen districts, held at Reading, Pa., a "national resistance fund" was also established at this meeting, to be made up of contributions of five cents each month, from each member of the order, and to be kept for the assistance of "brothers in need against the aggressions of employers." The objects of the order are declared in the preamble of its constitution to be the unification of labor, with the object of putting a check upon the power of aggregated wealth and upon unjust accumulation, and of obtaining the adoption of a system which will secure to the laborer the fruits of his toil. It therefore seeks "to bring within the fields of organization every department of productive industry, making knowledge a stand-point for action, and industrial moral worth, not wealth, the true standard of individual and national greatness; to secure to the toilers a proper share of the wealth they create, more of the leisure that rightfully belongs to them, more society advantages, more of the benefits, privileges, and emoluments of the world; in a word, all those rights and privileges necessary to make them capable of enjoying, appreciating, perpetuating, and defending the blessings of good government." It proposes the establishment of bureaus of labor statistics of the various governments, for the purpose of ascertaining the real condition of the producing masses; the establishment of co-operative institutions, productive and distributive; the reservation of public lands for actual settlers; the abrogation of all laws that do not bear equally upon capital and labor; the removal of technicalities, delays, and discriminations in the administration of justice, and the adoption of measures providing for the health and safety of persons engaged in various industrial occupations; weekly payment of their workmen by corporations in lawful money; the establishment of a first lien to mechanics and laborers on their work for the full amount of their wages; the abolition of

the contract system in public work; the substitution of arbitration for strikes; prohibition of the employment of children under fourteen years of age in workshops, mines, and factories; the abolition of the contract system in prisons and reformatory institutions; to both sexes equal pay for equal work; the reduction of the hours of labor to eight per day; and the issue by governments of "a purely national circulating medium, direct to the people without the intervention of any system of banking corporations." The general assembly in 1879 advised all the assemblies of the order to use their political power at legislative elections, but left it within the discretion of each local assembly to decide with which party it should act; but it also provided that no decisive action of this kind should be taken by any assembly unless at least three fourths of the members in attendance were united in support of it, and that no member should be compelled to vote with the majority. In 1880 women were made eligible to membership. In 1881 the general assembly voted to make the name and objects of the organization public. The membership of the order at that time was enumerated at 40,000 persons. In April, 1882, it had increased to 140,000, the increase having taken place chiefly in the smaller industrial cities and in the mining districts. Omitting 20,000 new accessions at Pittsburg, whose names have not yet been officially enrolled, the members of the order were at that time distributed by States as follow:

Pennsylvania.....	60,000	California.....	2,400
New York.....	9,000	Michigan.....	1,500
Illinois.....	8,000	Iowa.....	900
Indiana.....	6,500	Tennessee.....	800
Ohio.....	5,800	Wisconsin.....	800
Missouri.....	4,500	Kansas.....	800
Massachusetts.....	4,200	Minnesota.....	700
New Jersey.....	3,800	Colorado.....	700
Kentucky.....	3,000	Alabama.....	400
Maryland.....	2,800	Rhode Island.....	350
West Virginia.....	2,600	Indian Territory.....	150
Total.....			119,700

These members were represented in 44 district assemblies, with 1,830 local assemblies, in good working order. The order is represented by four weekly newspapers, advocating its principles and explaining its objects.

**STRIKE OF THE WESTERN IRON-WORKERS.**—A strike of the workmen in the iron-trade, which was intended to embrace all the mills west of the Alleghany Mountains, was begun on the 1st of June. It originated in a demand of the men for a new scale of wages, the operation of which would be to cause an advance in wages in all branches of the business of from 15 to 25 per cent, and was sustained by the Amalgamated Association of Iron and Steel Workers. The demand was made upon the Cleveland Rolling-Mill Company, Ohio, May 9th, and was met with a refusal, followed by the closing of the mill and the throwing of 4,500 men out of employment. Two weeks afterward the scale was submitted to the manufacturers of Wheeling, West Virginia, and vi-



city, and was refused by them. The rates of compensation for puddling iron had been fixed since 1875 by a scale based on the selling price of bar-iron, under which it was agreed that the wages of the puddlers should rise and fall with that price. The demand for an advance was now made at a time when the market rate for iron had been lowered, and this fact was alleged by the manufacturers as their reason for declining to accede to it. The workmen responded that the plea of the manufacturers was hardly fair, for, while they paid for puddling bar-iron, they did not sell the product as bar-iron, and at the price of that article, but put it upon the market in other shapes and at higher prices than ruled for bar-iron; and in consideration of this fact they thought they were entitled to a readjustment of their wages. At about the same time these questions were opened, the report of the American Iron and Steel Association on the condition of the American iron-trade at the end of May appeared. It showed that under various influences of short crops and speculative excitement the demand for most iron and steel products had sensibly slackened, and prices had very generally sympathized with the decline. Steel rails especially had undergone a remarkable fall in price. The situation at the time was pronounced far from encouraging, and in some respects discouraging. It was also alleged that the price of iron-ore had increased largely out of proportion to the price of manufactured iron; and a calculation was published, showing that while the cost in 1879 of producing a ton of iron from the pig to the finished bar was \$33, it would, under the scale demanded by the strikers, reach \$52.

A convention of manufacturers, at which every iron firm west of the Alleghany Mountains, except those in St. Louis and a few in Cincinnati, was represented, met at Pittsburg on the 30th of May, to consider what answer to return to the demands of the Amalgamated Association. The manufacturers of St. Louis sent assurances that they intended to resist every demand for an advance; those of Cincinnati did not regard themselves as affected by the strike, for they had already for some time been paying, by special agreement, the price for puddling now demanded by the Amalgamated Association. With the exception of these manufacturers, who were already operating under special agreements with their workmen, the meeting resolved to return a decided negative to the demand for a new scale.

The strike went into operation on the first day of June. The Amalgamated Association, by which it was directed, is a body formed by the union of the former separate organizations of iron and steel workers, and was estimated to include at this time about 75,000 members, or, practically, all the skilled iron-workers in the country, and was claimed to have a fund of \$500,000 in its treasury at Philadelphia. The extent of the interests affected by the strike

was shown in the following estimate of the number of establishments and the men employed in them, which was made by an officer of the Amalgamated Association:

NAMES OF PLACES.	Men.	Establishments.
Pittsburg District.....	20,000	80
West Virginia.....	8,228	6
Ohio.....	10,266	40
Indiana.....	1,740	9
Illinois.....	2,468	6
Missouri.....	855	6
Kentucky.....	2,170	8
Michigan.....	925	2
Nebraska.....	100	1
Wisconsin.....	500	1
Shenango Valley, Pennsylvania.....	8,500	7
Total.....	45,752	116

Not all of these men, however, it was added, were out on strike. Six establishments had signed the new scale, six or eight were already paying the price demanded, or were employing non-union men, and all the Western steel-works, some of which were included in the list, continued in operation. The manufacturers took advantage of the stoppage to repair their works; and some thought it was well that it had occurred; for they were apprehensive of embarrassment, if their orders should continue to diminish, while production was kept up at the full rate. It was even considered advantageous that a few mills should continue running, for they would supply the existing demand, and, by preventing a "shortness" in the market, would remove the temptation from the closed mills to yield to the demands of the strikers, for the sake of securing the business that might offer. On the 3d of June the workmen in the mills in Cincinnati decided to join in the strike, on the ground that the committee who had made the agreement with the proprietors, under which they were continuing their operations, had exceeded their constitutional powers. This course was not approved by the officers of the Amalgamated Association, and was receded from under their advice.

The Cleveland Rolling-Mill, which had not employed avowed union men, filled the ranks of its workmen with new men, and kept on. The strikers demanded that its managers should sign an agreement to be governed by the rules of the union. The company refused to do so, saying that their policy had been, and would continue to be, so to conduct the affairs of the concern as to insure to its workmen the highest wages its business would warrant, and that they trusted that "the pleasant relations now existing will not be disturbed by permitting outsiders to influence and mislead you." A committee, representing the strikers, subsequently visited the president of the company, to say that they had been deceived into going into the strike, and desired to return to work. The president declined to receive the men as a committee, for the company was determined not to recognize the union in any manner, and

had decided to make the return of any of the men to work conditional upon their signing an agreement not to be governed by it. The members of the committee were therefore directed to apply at the mills, if they wished employment.

At the beginning of August, or after the strike had been two months in operation, the position of the workmen had obviously been weakened, while the proprietors had not materially lost strength. A meeting of the Amalgamated Association was held at Chicago, the sessions of which were continued through several days, at which resolutions were passed guaranteeing the manufacturers that no advance on the scale prices for rolling and puddling would be asked for five years. The strike continued, however, till the 19th of September, when the district meetings of the Amalgamated Association at Pittsburg, Wheeling, and Youngstown resolved to return to work without conditions, and the president of the association officially declared it at an end.

**STRIKE OF FREIGHT-HANDLERS IN NEW YORK CITY.**—The freight-handlers of the railroads terminating in the city of New York struck in June, on a demand for an increase of their wages from seventeen cents to twenty cents an hour, or of three cents an hour or thirty cents a day. The agents of the railroad companies asked for time to consult with their superior officers before answering the demand, but the men insisted, and ceased work at once. The strike began with the Hudson River Railroad, but quickly extended to all the railroads having termini or docks in New York, and to the terminal stations in Jersey City. As a considerable advance had been recently made in the schedule of freight rates to the West, public opinion, as was indicated by expressions made in various ways, did not regard the demand of the workmen as unreasonable. The agents of the railroads explained that it had been precipitated upon them without notice, whereas, if due warning had been given them, and time for consultation, concessions might have been made which would satisfy the freight-handlers. The business at the railroad-stations and docks was almost wholly interrupted for a few days; freight accumulated in large quantities, and shippers and cartmen were subjected to great inconvenience in getting their goods received. New hands were employed to take the place of the strikers, engaged chiefly from among the recent immigrants from abroad; but they were unskilled at the business, and were not able to do effective service. The striking workmen paraded the streets in considerable bodies, visiting the railroad-stations and docks, for the purpose of persuading such new laborers as might be engaged to desist from work, and of preventing others from giving their services. These demonstrations became so formidable, especially in Jersey City, that forces of special policemen were enrolled. The Governor of New Jersey issued a proclamation, notifying

the civil authorities that it was their duty to use the power vested in them for the protection of persons and property, and promising the aid of the military power of the State if it should be needed. One of the railroads of New Jersey being in the hands of a receiver appointed by the court, the Chancellor of the State gave notice that any interference with its operation and management would be regarded as an obstruction offered to the execution of the order of the court, and treated as a contempt.

The interruption in transportation and inconvenience to shippers having continued several weeks, an action was brought in the Supreme Court of New York, July 17th, against the New York Central and Hudson River, and the New York, Lake Erie, and Western Railroad Companies, for a writ of mandamus to compel them to perform their duties as common carriers in delivering, receiving, and forwarding with all reasonable dispatch the freight put in their care or offered to them. The application was enforced by the affidavits of merchants regarding the losses they alleged they had suffered by the failure of the companies to forward their goods, and of the striking freight-handlers concerning their position as toward the companies. The institutors of the proceedings held that among the duties of the companies was that of operating their roads while they could be operated to carry the goods which might be offered them on the condition of the payment of the proper charges. When a railroad company, it was claimed, "sitting in the gates of commerce, closes its doors against the receipt of goods offered for transportation, or opens them tardily to oppress trade instead of supporting it, then it is answerable to the public whose franchises and trusts it is abusing. . . . The people in this case have sought nothing from the corporations except that they go on in the performance of their duties to their maximum power, and now pray that relief may be granted under the great prerogative right of writ of mandamus. When a railroad ceases to perform its function as a common carrier, or does it in a careless manner, causing public inconvenience and distress, it violates the provisions of its charter, and it is the duty of the Attorney-General to compel it to a discharge of its duties, and, if it still persists in its neglect, its franchise may be revoked." The matter of the strike, it was added, was merely put forward as an excuse. The position of the people (or promoters of the suit) was this: "These defendants may employ such help as they please so long as it is competent help, but they have no right to refuse the performance of their public duties because they can not get competent help at the price they are willing to pay for it. The relations of supply to demand in this country are such that capital can not fail to obtain adequate assistance anywhere." The respondent companies pleaded through



their attorney that the character of the application, as disclosed in the affidavits of the freight-handlers, was simply that the respondent companies should not be permitted to select their own employés at such reasonable compensation as might be agreed upon, but "should be compelled at the pressure of a judicial mandate to employ a certain class of men at a rate of compensation arbitrarily dictated by themselves. . . . On what principle of justice, freedom, or sound policy can a court of justice lend itself to the work of coercing one class of persons to enter into contracts with another class on terms dictated by the latter?" Moreover, the court had no right to exercise its discretion except upon the ground that the demand was reasonable and just. Now, it nowhere appeared in the petition and affidavits that the compensation the freight-handlers were already receiving was not a fair and proper one, or whether their demand was reasonable and just, or exorbitant and unjust. "Is it discreet or practicable for the court to undertake to regulate the employment of men by carriers, whether individuals or corporations?" The respondents also endeavored to show that action by mandamus was not proper, but that the right course lay in suits by aggrieved parties for damages.

The court in chambers decided, through a single justice, July 28th, refusing the application for writs of mandamus. It held that the court had not the power to prescribe a scale of wages; that while the writ of mandamus could issue to compel the exercise and discharge of those duties which belonged to the State or Government and were conferred upon the respondent by the State (such as to maintain and operate the road regularly, to build bridges across streams so as not to interfere with navigation, to take freight to the place of delivery, if on its line, etc.), it could not issue a mandamus to a common carrier to exercise his rights as such; for the right to become a common carrier did not emanate from the Government, but was universal. The refusal of a common carrier to transport freight was a private wrong redressible through suit by the person aggrieved, and not such a public wrong as would authorize a suit by and on the part of the State. The neglect or refusal of a railroad corporation to receive and transport freight tendered to it by citizens of the State was of this character, and remediable in this way. Furthermore, "the writ of mandamus, when it is issued, must clearly and distinctly state the act or duties which are by it commanded to be performed, so that the party to whom it is addressed may distinctly understand what he is to do. If he fails or neglects to perform, an attachment will issue against him to the end that he may be adjudged in contempt of the process of the court. It is not in the power of the court to look into the future and determine the kinds or quantities of freight that will hereafter be presented for transportation,

and by an order specify how and in what manner the same shall be carried, or what kinds shall take preference." The court, therefore, quashed the writ. Before this decision was given, the railroad companies had secured full forces of men at their stations, most of their old laborers having returned, and the strike had failed. The decision of the court in chambers was reversed in January, 1883, by the same court in general term.

**STRIKE OF COAL-MINERS.**—A strike was begun in March in the bituminous-coal mines of Western Pennsylvania and Ohio. The proprietors employed foreigners and colored men to take the places of their disaffected workmen. The Miners' Association then directed a general strike, but afterward modified its order so as to limit its bearing to the pits of operators who were filling contracts for mines whose men were on strike, and to those which were supplying coal-yards in Pittsburg. A policy of passive resistance against the employment of colored miners was persisted in, and concerted efforts were made to induce men of this class working as substitutes for men on strike to desist. This strike was encouraged by the Knights of Labor, and continued through most of the summer.

**LAW, CONSTITUTIONAL.** During the session beginning in October, 1882, several cases involving important questions of constitutional law were decided by the Supreme Court of the United States.

**THE KU-KLUX LAW.**—In the case of the United States against Harris the court set aside as unconstitutional what has been known as the "Ku-klux law." This law was passed by Congress in 1871, and now appears as section 5,519 of the Revised Statutes of the United States. It is as follows:

If two or more persons in any State or Territory conspire or go in disguise upon the highway or on the premises of another, for the purpose of depriving either directly or indirectly any person or class of persons of the equal protection of the laws or of equal privileges or immunities under the laws, or for the purpose of preventing or hindering the constituted authorities of any State or Territory from giving or securing to all persons within such State or Territory the equal protection of the laws, each of said persons shall be punished by a fine of not less than \$500 nor more than \$5,000, or by imprisonment, with or without hard labor, not less than six months nor more than six years, or by both such fine and imprisonment.

Under this law one R. G. Harris and nineteen others were indicted and arraigned in the United States Circuit Court for the Western District of Tennessee for conspiring to commit violence upon certain negroes who had been arrested for a criminal offense, and were in the custody of the sheriff. The defense raised the objection that the act of Congress under which the prisoners were indicted was unconstitutional. In order to determine this question the court considered four clauses of the Federal Constitution, namely, section 2 of Article IV of the original Constitution, and the thirteenth, fourteenth, and fifteenth amend-



ments. Taking these up in inverse order, Justice Woods, who delivered the opinion, said that the fifteenth amendment simply secures to all citizens of the United States the right to vote, and protects that right against all hostile legislation on account of race, color, or previous condition of servitude. This gave to Congress no power to pass the law embodied in section 5,519 of the Revised Statutes. Nor was such power found in the fourteenth amendment, which declares that "no State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States, nor shall any State deprive any person of life, liberty, or property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws." This amendment, as the Court held in *Virginia against Rives*, 100 United States Reports, 313, has reference to State action exclusively, and not to any action of private persons. After citing this case and the United States against *Cruikshank*, 92 United States Reports, 542, Justice Woods said:

These authorities show exclusively that the legislation under consideration finds no warrant for its enactment in the fourteenth amendment.

The language of the amendment does not leave this subject in doubt. When the State has been guilty of no violation of its provisions; when it has not made or enforced any law abridging the privileges or immunities of citizens of the United States; when no one of its departments has deprived any person of life, liberty, or property without due process of law, or denied to any person within its jurisdiction the equal protection of the laws; when, on the contrary, the laws of the State, as enacted by its legislative, and construed by its judicial, and administered by its executive departments, recognize and protect the rights of all persons, the amendment imposes no duty and confers no power upon Congress.

Section 5,519 of the Revised Statutes is not limited to take effect only in case the State shall abridge the privileges or immunities of citizens of the United States, or deprive any person of life, liberty, or property without due process of law, or deny to any person the equal protection of the laws. It applies, no matter how well the State may have performed its duty. Under it private persons are liable to punishment for conspiring to deprive any one of the equal protection of the laws enacted by the State.

In the indictment in this case, for instance, which would be a good indictment under the law if the law itself were valid, there is no intimation that the State of Tennessee has passed any law or done any act forbidden by the fourteenth amendment. On the contrary, the gravamen of the charge against the accused is that they conspired to deprive certain citizens of the United States and of the State of Tennessee of the equal protection accorded them by the laws of Tennessee.

As, therefore, the section of the law under consideration is directed exclusively against the action of private persons, without reference to the laws of the States or their administration by the officers of the State, we are clear in the opinion that it is not warranted by any clause in the fourteenth amendment to the Constitution.

Coming to the thirteenth amendment, the Court said that it is clear that this amendment, besides abolishing forever slavery in the United States, gives power to Congress to protect all persons within the jurisdiction of the

United States from being in any way subjected to slavery or involuntary servitude, except as a punishment for crime, and in the enjoyment of that freedom which it was the object of the amendment to secure. "Congress has, by virtue of this amendment, exacted that all persons within the jurisdiction of the United States shall have the same right in every State and Territory to make and enforce contracts, to sue, be parties, give evidence, and to the full and equal benefit of all laws and proceedings for the security of persons and property as is enjoyed by white citizens, and shall be subject to like punishment, pains, penalties, taxes, licenses, and exactions of every kind, and no other." The opinion then proceeds as follows:

But the question with which we have to deal is, Does the thirteenth amendment warrant the enactment of section 5,519 of the Revised Statutes? We are of opinion that it does not. Our conclusion is based on the fact that the provisions of that section are broader than the thirteenth amendment would justify. Under that section it would be an offense for two or more white persons to conspire, etc., for the purpose of depriving another white person of the equal protection of the laws. It would be an offense for two or more colored persons, enfranchised slaves, to conspire with the same purpose against a white citizen or against another colored citizen who had never been a slave. Even if the amendment is held to be directed against the action of private individuals, as well as against the action of the States and United States, the law under consideration covers cases both within and without the provisions of the amendment. It covers any conspiracy between two free white men against another free white man to deprive the latter of any right accorded him by the laws of the State or of the United States. A law under which two or more free white private citizens could be punished for conspiring or going in disguise for the purpose of depriving another free white citizen of a right accorded by the law of the State to all classes of persons, as, for instance, the right to make a contract, bring a suit, or give evidence, clearly can not be authorized by the amendment which simply prohibits slavery and involuntary servitude.

Those provisions of the law, which are broader than is warranted by the article of the Constitution by which they are supposed to be authorized, can not be sustained.

There is another view which strengthens this conclusion. If Congress has constitutional authority under the thirteenth amendment to punish a conspiracy between two persons to do an unlawful act, it can punish the act itself, whether done by one or more persons.

A private person can not make constitutions or laws, nor can he with authority construe them, nor can he administer or execute them. The only way, therefore, in which one private person can deprive another of the equal protection of the laws is by the commission of some offense against the laws which protect the rights of persons, as by theft, burglary, arson, libel, assault, or murder. If, therefore, we hold that section 5,519 is warranted by the thirteenth amendment, we should, by virtue of that amendment, accord to Congress the power to punish every crime by which the right of any person to life, property, or reputation is invaded. Thus, under a provision of the Constitution which simply abolished slavery and involuntary servitude, we should, with few exceptions, invest Congress with power over the whole catalogue of crimes. A construction of the amendment which leads to such a result is clearly unsound.

The Court concluded by saying that there is



only one other clause in the Federal Constitution which can in any degree be supposed to sustain the law under consideration, namely, section 2 of Article IV, which declares that "the citizens of each State shall be entitled to all the privileges and immunities of citizens of the several States." But this section, as the Court held, like the fourteenth amendment, is directed against State action. Its object is to place the citizens of each State upon the same footing with citizens of other States and inhibit discriminative legislation against them by other States. "It was never supposed," said Justice Woods, "that this clause conferred on Congress the power to enact a law which would punish a private citizen for an invasion of the rights of his fellow-citizen, conferred by the State of which they were both residents on all its citizens alike."

**CONSTITUTIONALITY OF THE CIVIL RIGHTS ACT.**—The above decision raises the question whether the Civil Rights Act, passed by Congress in 1875, to secure to colored people equal rights with white persons in theatres, hotels, and public conveyances, is not also unconstitutional. The first section of this act declares that "all persons within the jurisdiction of the United States shall be entitled to the full and equal enjoyment of the accommodations, advantages, facilities, and privileges of inns, public conveyances on land and water, theatres, and other places of public amusement; subject only to the conditions and limitations established by law, and applicable alike to citizens of every race and color, regardless of any previous condition of servitude." The act then gives to any aggrieved person an action for damages, and also subjects the offender to fine and imprisonment. According to the above decision of the Supreme Court, in the *Harris* case, the fourteenth amendment prohibits States, but not individuals, from denying equal rights to colored citizens, and that Congress has no power to protect those rights against individual invasion or violation. From this it would seem to follow that Congress has no constitutional authority to prohibit the keepers of hotels and the managers of theatres and other places of public amusement from making any unjust discrimination against colored persons. On the same principle, it would have no power under the fourteenth amendment to legislate in furtherance of the equal rights of colored persons in public conveyances. And it was so held by the United States Court for the District of Kentucky, in August, 1882. In that case (reported in 13 Federal Reporter, 337) Mrs. Smoot, a colored woman, was denied admission to a first-class passenger-car on the railroad from Lexington to Covington. She brought an action for damages against the company under the act of Congress of March, 1875. But Judge Barr held that the fourteenth amendment prohibits only States and not individuals from denying equal rights to colored citizens, and that

that amendment gives to Congress no power to declare that railroad corporations shall not make any discrimination against colored passengers.

There is, however, another aspect of this question. The commercial clause of the Constitution gives to Congress power to regulate foreign and interstate commerce. This provision was not considered in the *Smoot* case, for the reason that the defendant road was entirely within the State of Kentucky. But there is little room for doubt that the power of Congress to regulate foreign and interstate commerce extends in such case to the protection of colored passengers.

The decision of the United States Supreme Court, in the case of *Hall* against *De Cuir*, rendered in 1877, and reported in 95 United States Reports, 485, bears on this point. In that case it appeared that the Legislature of Louisiana had passed a law prohibiting any discrimination against colored passengers in public conveyances. Mrs. De Cuir, a colored woman, took passage from New Orleans to Hermitage, La., on a boat plying between the former city and Vicksburg, Miss. She was refused admission to the cabin set apart for white persons, and sued for damages under the State law. The Supreme Court of the United States held that the Louisiana statute, so far as it applied to foreign or interstate transportation, was an invasion of the powers vested by the Constitution in Congress. "We think," said Chief-Justice Waite, "that this statute, to the extent that it requires those engaged in the transportation of passengers among the States to carry colored passengers in Louisiana in the same cabin with the whites, is unconstitutional and void. If the public good requires such legislation, it must come from Congress, and not the States."

**A STATE LAW AGAINST MISCEGENATION.**—In *Pace* against the State of Alabama, decided January 29, 1883, the Supreme Court held that a State law against miscegenation is not a violation of the fourteenth amendment. Section 4,184 of the Code of Alabama imposes a specified penalty upon any man and woman who live together in adultery. Section 4,189 prescribes a more severe penalty when the offense is committed by a white person and a negro, and the penalty is extended to the intermarriage of whites and blacks. The plaintiff in error, a colored man who had been indicted for living with a white woman, contended, through his counsel, that by the above legislation a discrimination was made against colored persons, in violation of the fourteenth amendment. The Court unanimously held the law to be constitutional. Justice Field, who delivered the opinion, said: "The defect in the argument of counsel consists in his assumption that any discrimination is made by the laws of Alabama in the punishment provided for the offense for which the plaintiff in error was indicted, when committed by a person of the

African race, and when committed by a white person. The two sections of the code are entirely consistent. The one prescribes, generally, a punishment for an offense committed between persons of different sexes; the other prescribes a punishment for an offense which can only be committed when the two sexes are of different races. There is in neither section any discrimination against either sex. Section 4,184 equally includes the offense when the persons of the two sexes are both white, and when they are both black. Section 4,189 applies the same punishment to both offenders, the white and the black. Indeed, the offense against which this latter section is aimed can not be committed without involving the persons of both races in the same punishment. Whatever discrimination is made in the punishment prescribed in the two sections, is directed against the offense designated, and not against the person of any particular color or race. The punishment of each offending person, whether white or black, is the same."

**SUITS AGAINST THE UNITED STATES.**—In the case of the United States against Lee, decided December 4, 1882, the Court held by a majority of only one, that while the United States can not be sued without its own consent, as prescribed by Congress, this principle is limited to suits against the United States directly and by name, and does not extend to actions brought against officers or agents of the Government for the recovery of property held for the United States by such officers or agents. The question arose out of proceedings relating to the Arlington estate. This tract of land, embracing about eleven hundred acres, was originally the proper of George Washington Parke Custis, who devised it to his daughter, the wife of General Robert E. Lee, and after her death, to the grandson of the testator, G. W. P. C. Lee. In 1864 it was sold for non-payment of taxes under acts of Congress of 1862 and 1863, which provided that no person but the owner in person should be allowed to pay the overdue taxes. The owner not appearing in person at the sale, the property was bid in by the tax commissioners for the United States. It has since been used as a national cemetery for and other Government purposes, and was at the time of the proceedings in this controversy in the possession of Kaufman and Strong, as officers of the United States. Suit for its recovery was brought some time ago against Kaufman and Strong, in one of the State courts of Virginia, by General G. W. P. C. Lee, claiming to be seized of the fee under the will of his grandfather. The suit was removed to the United States Circuit Court, where Attorney-General Devens appeared in behalf of the United States, and opposed the objection that the action, being one against the Government without its consent, could not be maintained. The case was then taken to the United States Supreme Court. It was conceded by that court that the United States can not be

sued directly and by name by one of its citizens without its own consent. But in this case the suit was not nominally and directly against the United States, but against its officers in possession of property claimed by the United States. On the question, whether suit could be maintained against such officers, the court was divided. Five judges, Miller, Field, Harlan, Matthews, and Blatchford, held that the action could be sustained. Chief-Justice Waite, and Justices Bradley, Woods, and Gray, maintained the contrary. Two elaborate opinions were rendered, that of the court by Justice Miller, and that of the minority by Justice Gray.

Justice Miller pointed out that the doctrine that the United States can not be sued by an individual without its consent is derived, not from the Constitution, but from the laws and practices of our English ancestors. But the most important reasons advanced in support of the principle in England do not apply to our form of government. For instance, it is an ancient principle in England that the King could not be sued except where his consent had been given on petition of right. "There is in this country, however," says Justice Miller, "no such thing as the petition of right, as there is no such thing as a kingly head to the nation, or to any of the States which compose it. There is vested in no officer or body the authority to consent that the State shall be sued except in the law-making power, which may give such consent on the terms it may choose. Congress has created a court [United States Court of Claims] in which it has authorized suits to be brought against the United States, but has limited such suits to those arising on contract, with a few unimportant exceptions. What were the reasons which forbid that the King should be sued in his own court, and how do those reasons apply to the political body corporate which we call the United States of America? As regards the King, one reason given by the old judges was the absurdity of the King's sending a writ to himself to command the King to appear in the King's court. No such reason exists in our Government, as process runs in the name of the President, and may be served on the Attorney-General, as was done in the case of Chisholm against the State of Georgia (2 Dallas Reports, 419). Nor can it be said that the dignity of the Government is degraded by appearing as a defendant in the courts of its own creation, because it is constantly appearing as a party in such courts, and submitting its rights as against the citizens to their judgment. Mr. Justice Gray, of the Supreme Court of Massachusetts, in an able and learned opinion which exhausts the sources of information on this subject, says: 'The broader reason is, that it would be inconsistent with the very idea of supreme executive power, and would endanger the performance of the public duties of the sovereign, to subject him to repeated suits as a matter of right, at the



will of any citizen, and to submit to the judicial tribunals the control and disposition of his public property, his instruments and means of carrying on his government in war and in peace, and the money in his treasury.' (Briggs against *The Light-Boats*, 11 Allen's Reports, 162.) As we have no person in this Government who exercises supreme executive power, or performs the public duties of a sovereign, it is difficult to see on what solid foundation of principle the exemption from liability to suit rests. It seems most probable that it has been adopted in our courts as a part of the general doctrine of publicists, that the supreme power in every State, wherever it may reside, shall not be compelled, by process of courts of its own creation, to defend itself from assaults in those courts."

The Court said that but little weight could be given to the English decisions on the question whether a citizen might sue an officer of the Government for the recovery of property, for the reasons, first, that the petition of right afforded a judicial remedy in England, and hence there was no necessity for suing the officers or servants of the King; and, second, owing to the vast difference in the essential character of the two governments with respect to the source and the depositaries of power. After citing American authorities, Justice Miller proceeded:

Looking at the question upon principle, and apart from the authority of adjudged cases, we think it still clearer that this branch of the defense can not be maintained. It seems to be opposed to all the principles upon which the rights of the citizen, when brought in collision with the acts of the Government, must be determined. In such case there is no safety for the citizen, except in the protection of the judicial tribunals, for rights which have been invaded by the officers of the Government, professing to act in its name. There remains to him but the alternative of resistance, which may amount to crime. The position assumed here is that, however clear his rights, no remedy can be afforded to him when it is seen that his opponent is an officer of the United States, claiming to act under its authority; for as Chief-Justice Marshall says, to examine whether this authority is rightfully assumed is the exercise of jurisdiction, and must lead to the decision of the merits of the question. The objection of the plaintiffs in error necessarily forbids any inquiry into the truth of the assumption that the parties setting up such authority are lawfully possessed of it, for the argument is that the formal suggestion of the existence of such authority forbids any inquiry into the truth of the suggestion. . . . The defense stands here solely upon the absolute immunity from judicial inquiry of every one who asserts authority from the executive branch of the Government, however clear it may be made that the Executive possesses no such power. Not only that no such power is given, but that it is absolutely prohibited, both to the Executive and the legislative, to deprive any one of life, liberty, or property without due process of law, or to take private property without just compensation. . . .

No man in this country is so high that he is above the law. No officer of the law may set that law at defiance with impunity. All the officers of the Government, from the highest to the lowest, are creatures of the law, and are bound to obey it. It is the only supreme power in our system of government, and every man who by accepting office participates in its functions is only the more strongly bound to submit

to that supremacy, and to observe the limitations which it imposes upon the exercise of the authority which it gives.

Courts of justice are established, not only to decide upon the controverted rights of the citizens as against each other, but also upon rights in controversy between them and the Government, and the docket of this court is crowded with controversies of the latter class. Shall it be said, in the face of all this, and of the acknowledged right of the judiciary to decide in proper cases, statutes which have been passed by both branches of Congress, and approved by the President, to be unconstitutional, that the courts can not give remedy when the citizen has been deprived of his property by force, his estate seized and converted to the use of the Government without any lawful authority, without any process of law, and without any compensation, because the President has ordered it and his officers are in possession? If such be the law of this country, it sanctions a tyranny which has no existence in the monarchies of Europe, nor in any other government which has a just claim to well-regulated liberty and the protection of personal rights. It can not be, then, that when in a suit between two citizens for the ownership of real estate, one of them has established his right to the possession of the property according to all the forms of judicial procedure, and by the verdict of a jury and the judgment of the court, the wrongful possessor can say successfully to the court: "Stop, here; I hold by order of the President, and the progress of justice must be stayed"; that, though the nature of the controversy is one peculiarly appropriate to the judicial function, though the United States is no party to the suit, though one of the three great branches of the Government to which by the Constitution this duty has been assigned, has declared its judgment after a fair trial, the unsuccessful party can interpose an absolute veto upon that judgment by the production of an order of the Secretary of War, which that officer had no more authority to make than the humblest private citizen.

By the four dissenting justices it was maintained, in an elaborate opinion written by Justice Gray, that "the sovereign is not liable to be sued in any judicial tribunal without its consent. The sovereign can not hold property except by agents. To maintain an action for the recovery of possession of property held by the sovereign through its agents, not claiming any title or right in themselves, but only as the representatives of the sovereign and in its behalf, is to maintain an action to recover possession of the property against the sovereign; and to evade such possession of the agents, by execution or other judicial process, is to invade the possession of the sovereign and to violate the fundamental maxim that the sovereign can not be sued. That maxim is not limited to a monarchy, but is of equal force in a republic. In the one, as in the other, it is essential to the common defense and general welfare that the sovereign should not, without its consent, be dispossessed by judicial process of forts, arsenals, military posts, and ships of war necessary to guard the national existence against insurrection and invasion; of custom-houses and revenue-cutters, employed in the collection of the revenue; or of light-houses and light-ships, established for the security of commerce with foreign nations and among the different parts of the country. These principles appear to us to be axioms of public law, which would need no reference to authorities in their support,



were it not for the exceeding importance and interest of the case, the great ability with which it has been argued, and the difference of opinion that has been manifested as to the extent and application of the precedents." Justice Gray then proceeded to cite and apply numerous English and American decisions in support of the views of the minority of the court.

**SUITS AGAINST A STATE.**—On March 5, 1883, the Court rendered an important opinion, holding that one State can not be sued in the Federal courts by another State acting as the assignee of one of its citizens. The question was raised in two similar suits brought by New York and New Hampshire against Louisiana. The essential facts were substantially the same in both cases. It appeared that each of the plaintiff States had passed a law providing that any of its citizens holding bonds or other obligations of another State might transfer them to his own State, and have it bring suit against the defendant State. Under these laws alleged "repudiated" bonds of Louisiana were assigned to New York and New Hampshire by citizens of those States respectively, and suits were accordingly brought. The Constitution expressly authorizes suits to be brought by one State against another in the Federal courts. But the eleventh amendment declares that "the judicial power of the United States shall not be construed to extend to any suit in law or equity commenced or prosecuted against one of the United States by citizens of another State, or by citizens or subjects of any foreign State." In an elaborate opinion on the question raised, Chief-Justice Waite expressed in substance the following views:

Under the operation of this amendment the actual owners of bonds and coupons held by New Hampshire and New York are precluded from prosecuting these suits in their own names. The real question, therefore, is whether they can sue in the name of their respective States after getting the consent of the State, or, to put it in another way, whether a State can allow the use of its name in such a suit for the benefit of one of its citizens. The language of the amendment is in effect that the judicial power of the United States shall not extend to any suit commenced or prosecuted by citizens of one State against another State. No one can look at the pleadings and testimony in these cases without being satisfied beyond all doubt that they were in legal effect commenced, and are now prosecuted solely by the owners of the bonds and coupons. The State and the Attorney-General are only nominal actors in the proceeding. The bond-owner, whoever he may be, is the promoter and manager of the suit. He pays the expenses, is the only one authorized to conclude a compromise, and if any money is ever collected it must be paid to him without even passing through the form of getting into the Treasury of the State. The State is nothing more nor less than a mere collecting agent of the owners of the bonds and coupons, and, while the suits are in the names of the States, they are under the control of individual citizens, and are prosecuted and carried on altogether by and for them.

It is contended, however, that notwithstanding the prohibition of the amendment the States may prosecute the suits, because as the "sovereign and trustee of its citizens" a State is "clothed with the right and faculty of making an imperative demand upon another independent State for the payment of debts which it

owes to the citizens of the former." There is no doubt but one nation may, if it see fit, demand of another nation the payment of a debt owing by the latter to a citizen of the former; but the States are not nations either as between themselves or toward foreign nations. They are sovereign within their spheres, but their sovereignty stops short of nationality. Their political status at home and abroad is that of States in the United States. But it is said that even if a State, as sovereign trustee for its citizens, did surrender to the national Government its power of prosecuting the claims of its citizens against another State by force, it got in lieu the constitutional right of suit in the national courts. There is no principle of international law which makes it the duty of one nation to assume the collection of the claims of its citizens against another nation, if the citizens themselves have ample means of redress without the intervention of their government. Under the Constitution, as it was originally construed, a citizen of one State could sue another State in the courts of the United States for himself and obtain the same relief that his State could get for him if it should sue. Certainly, when he can sue for himself, there is no necessity for power in his State to sue in his behalf, and we can not believe it was intended by the framers of the Constitution to allow both remedies in such a case. Therefore, the special remedies granted to the citizen himself must be deemed to have been the only remedy the citizen of one State could have under the Constitution against another State, for the redress of his grievances, except such as the delinquent State saw fit itself to grant. In other words, the giving of the direct remedy to the citizen himself was equivalent to taking away any indirect remedy he might otherwise have claimed through the intervention of his State upon any principle of the law of nations. It follows that, when the amendment took away the special remedy, there was no other left. Nothing was added to the Constitution by what was thus done. No power taken away by the grant of the special remedy was restored by the amendment. The effect of the amendment was simply to revoke the new right that had been given, and leave the limitations to stand as they were. The evident purpose of the amendment was to prohibit all suits against a State by or for citizens of other States or aliens, without the consent of the State to be sued; and in our opinion one State can not create a controversy with another State, within the meaning of that term as used in the judicial clauses of the Constitution, by assuming the prosecution of debts owing by the other States to its citizens. Such being the case, we are satisfied that we are prohibited both by the letter and the spirit of the Constitution from entertaining these suits, and the bill in each of them is consequently dismissed.

**A CONSTITUTIONAL AMENDMENT PROPOSED.**—On January 19, 1883, William R. Moore, of Tennessee, introduced into the House of Representatives the following joint resolution, proposing a sixteenth amendment to the Constitution of the United States:

*Resolved by the Senate and House of Representatives (two thirds of each House concurring therein), That the following amendment to the Constitution be and is hereby proposed to the States, to become valid when ratified by the Legislatures of three fourths of the several States, as provided in the Constitution:*

#### ARTICLE XVI.

SECTION 1. That Article XI of the present Constitution be and the same is hereby rescinded.

SEC. 2. That Congress shall have power to provide, by appropriate legislation, for the legal enforcement of the obligation of contracts entered into by any of the States of this Union.

The repeal of the eleventh amendment would enable any citizen of one State to sue another State in the Federal courts. The alleged pur-



pose of Mr. Moore's proposed amendment was, among other things, to give a remedy to the holders of repudiated State bonds and obligations. The concurrent resolution was not voted upon.

**TAXATION OF IMMIGRANTS.**—The right of a State to levy a tax on immigrants, for the declared purpose of raising money for the execution of its inspection laws, was denied by the Supreme Court, in an opinion announced February 5, 1883. The Court decided, in 1876, that the statute of New York, taxing immigrants for the purpose of raising money to defray the expense of the Emigration Board of that State, was a violation of that clause of the Constitution which vests in Congress the power to regulate foreign commerce. Early in 1882 another statute, for the same purpose, was passed by the Legislature of New York. It imposed "a duty" of one dollar on every alien passenger brought to the port of New York. In order to avoid the constitutional objection to the former statute, it was entitled "An act to raise money for the execution of the inspection laws of the State of New York," and provided that the tax levied should be paid by the steamers bringing the immigrants to the Chamberlain of the city of New York; and then directed that the Chamberlain should hand over to the Commissioners of Emigration whatever money might be necessary for the execution of the inspection laws of the State, and the balance of the tax collected to the Treasurer of the United States. A few days before the enactment of this law the Legislature had passed another "Act for the inspection of alien emigrants, and their effects, by the Commissioners of Emigration," which prescribed regulations for the inspection of immigrants arriving at the port of New York. It was claimed that this legislation, including the imposition of the head-tax, was a lawful exercise of the power of the State under Article I, section 10, clause 2 of the Federal Constitution, which declares that "no State shall, without the consent of the Congress, lay any imposts or duties on imports or exports, except what may be actually necessary for executing its inspection laws." The *Compagnie Générale Transatlantique* refused to pay the tax, and contested the constitutionality of the legislation imposing it. In an opinion, written by Justice Miller, the Supreme Court said that neither at the time of the formation of the Constitution, nor since, has any rightful inspection law included anything but personal property as a subject of its operation; nor has it ever been held by any competent judicial authority that the words "imports" and "exports" are used in that instrument as applicable to free human beings. It knew of nothing which could be exported from one country, or imported into another, that is not in some sense property—property in regard to which some one is owner, and of which the owner is either the importer or the exporter. This can

not apply to a free man. Of him it is never said that he imports himself, or his wife, or his children. Free human beings are not imports or exports within the meaning of the Constitution. Furthermore, said the Court, it appears that the object of these New York enactments goes far beyond any correct view of the purpose of an inspection law. The commissioners are to inspect all persons arriving from any foreign country, to ascertain who among them are "habitual criminals or pauper lunatics, idiots, or imbeciles, or orphan persons, without means or capacity to support themselves, and subject to become a public charge." It may be safely said that these are matters incapable of being satisfactorily ascertained by inspection. What is an "inspection"? Something which can be done by looking at, or weighing, or measuring the thing to be inspected, or by applying to it at once some crucial test. When testimony or evidence is to be taken and examined, it is not "inspection" in any sense whatever. Another section provides for the custody, the support, and the treatment for diseases of these persons, and the retransport of criminals. Are these "inspection laws"? Is the ascertainment of the guilt of a criminal to be made by "inspection"? In fact, these statutes differ from those heretofore held void, only in that they are called in their caption "inspection laws," and in that provision is made for the payment of any surplus, after the support of paupers, criminals, and diseased persons, into the Treasury of the United States—a surplus which, in this enlarged view of what are the expenses of an inspection law, it is safe to say will never exist. A State can not make a law designed to raise money to support paupers, to detect or prevent crime, to guard against disease, and cure the sick, an "inspection" law within the constitutional meaning of that word, by calling it so in the title.

**TOBACCO INSPECTION.**—In the case of *Henry A. Turner*, plaintiff in error, against the State of Maryland, the Court, on February 5, 1883, gave an elaborate opinion on the question of the constitutionality of certain provisions of the laws of Maryland relating to tobacco inspection. The provisions in question, being section 41 of chapter 346 of the Laws of Maryland of 1864, as amended and re-enacted by chapter 291 of the Laws of 1870, are as follows:

After the passage of this act it shall not be lawful to carry out of this State, in hogsheds, any tobacco raised in this State, except in hogsheds which shall have been inspected, passed, and marked, agreeably to the provisions of this act, unless such tobacco shall have been inspected and passed before this act goes into operation, and any person violating the provisions of this section shall forfeit and pay the sum of \$300, which may be recovered in any court of law of this State, and which shall go to the credit of the tobacco fund; provided that nothing herein contained shall be construed to prohibit any grower of tobacco or any purchaser thereof, who may pack the same in the county or neighborhood where grown, from ex-

porting or carrying out of this State any such tobacco without having the same opened for inspection; but such tobacco, so exported or carried out of this State without inspection, shall in all cases be marked with the name in full of the owner thereof and the residence of such owner, and shall be liable to the same charge of outage and storage as in other cases, and any such person who shall carry or send out of this State any such tobacco without having it so marked, shall be subject to the penalty prescribed by this section.

In an elaborate opinion written by Justice Blatchford, the Court, affirming the judgment of the Maryland Court of Appeals, held: first, that this section, in its provisions as to charges for outage and storage, is not in violation of clause 2 of section 10 of Article I of the Constitution of the United States as respects any impost or duty imposed by it on exports, or in violation of the clause of section 8 of Article I, which gives power to Congress "to regulate commerce with foreign nations and among the several States"; second, that the charge for outage under the proviso of said section 41, as amended and re-enacted, is an "inspection duty" within the meaning of the Constitution; third, that dispensing with an opening for an inspection of the hogsheds mentioned in the proviso does not, in view of the other provisions of the tobacco inspection laws of Maryland, deprive those statutes of the character of inspection laws; fourth, that it is not foreign to the character of an inspection law to require every hogshed of tobacco to be brought to a State tobacco warehouse; fifth, that the section of the law in controversy is not a regulation of commerce, or unconstitutional as discriminating between the State buyer and manufacturer of leaf-tobacco and the purchaser who buys for the purpose of transporting the tobacco to another State or to a foreign country, or a discrimination between different classes of exporters of tobacco; sixth, that the charge for outage in this case appears to be a charge for services properly rendered.

**THE RAILROAD-TAX CASE.**—No more important constitutional question was raised during the year than that passed upon by the United States Circuit Court in California, and afterward argued before the Supreme Court of the United States, in the "railroad-tax case." The suit was begun by the county of San Mateo against the Southern Pacific Railroad Company for the recovery of State and county taxes. The company set up the defense that, in the assessment of its property, according to which the taxes claimed had been levied, an unlawful and unjust discrimination was made between its property and the property of individuals. The Constitution of California provides that all property in the State, with certain exceptions, shall be taxed in proportion to its value; but, in the ascertainment of its value as a basis for taxation, a distinction is made between the property of persons and that of railroad corporations. In the assessment of individual property, the amount of mortgages on it is deducted from its value; in the case of

corporate property this deduction is not allowed. The practical effect of this law was thus illustrated by Justice Field: "Suppose a private person owns a farm which is valued at \$100,000, and is encumbered with a mortgage amounting to \$80,000; he is, in that case, assessed at \$20,000; if the rate of taxation be two per cent, he would pay \$400 taxes. If a railroad company owns an adjoining tract worth \$100,000, which is also encumbered by a mortgage for \$80,000, it would be assessed for \$100,000, and required to pay \$2,000 taxes, or five times as much as the private person." The railroad company contended, among other things, that the provision of the Constitution of California which authorized this discrimination against corporations was in violation of the fourteenth amendment to the Federal Constitution, which declares that no State shall deny to any person within its jurisdiction the equal protection of the laws. The plaintiff maintained, first, that the fourteenth amendment was intended only to secure civil rights to colored citizens; and, second, that a corporation is not a person within the meaning of that amendment. On the questions thus raised two elaborate opinions were rendered by Circuit-Justice Field, of the United States Supreme Court, and Circuit-Judge Sawyer, who agreed that equal protection of the law is guaranteed by the fourteenth amendment to corporations as well as persons, and that the amendment is aimed against unjust discrimination in taxation as well as in the matter of personal rights. Justice Field admitted that the power of taxation possessed by the State may be exercised upon any subject within its jurisdiction, and to any extent not prohibited by the Constitution of the United States expressly or by clear implication. Hence, where complaint is made in a Federal court of a tax levied by the States, the question always is, whether there is any inhibition, express or implied, in the Federal Constitution upon the imposition of the tax. Considering this question in the light of the fourteenth amendment, he said:

The fourteenth amendment of the Constitution, in declaring that no State shall deny to any person within its jurisdiction the equal protection of the laws, imposes a limitation upon the exercise of all the powers of the State which can touch the individual or his property, including among them that of taxation. Whatever the State may do, it can not deprive any one within its jurisdiction of the equal protection of the laws. And by equal protection of the laws is meant equal security under them to every one on similar terms, in his life, his liberty, his property, and in the pursuit of happiness. It not only implies the right of each to resort, on the same terms with others, to the courts of the country for the security of his person and property, the prevention and redress of wrongs, and the enforcement of contracts, but also his exemption from any greater burdens or charges than such as are equally imposed upon all others under like circumstances.

Unequal exactions in every form, or under any pretense, are absolutely forbidden; and, of course, unequal taxation, for it is in that form that oppressive burdens are usually laid. It is not possible to con-



ceive of equal protection under any system of laws where arbitrary and unequal taxation is permissible; where different persons may be taxed on their property of the same kind, similarly situated, at different rates; where, for instance, one may be taxed at 1 per cent on the value of his property, another at 2 or 5 per cent, or where one may be thus taxed according to his color, because he is white, or black, or brown, or yellow, or according to any other rule than that of a fixed rate proportionate to the value of his property.

The Court then proceeded to consider the question whether a corporation can be considered a person within the meaning of the fourteenth amendment so as to be entitled with respect to its property to the equal protection of the laws. It was conceded that the amendment had its origin in a purpose to secure colored persons whom it made citizens in the full enjoyment of their freedom and civil rights.

But (said Justice Field) the generality of the language used extends the protection of its provisions to persons of every race and condition against discriminating and hostile State action of any kind. Its effect, in preserving free institutions and preventing harsh and oppressive State legislation, can hardly be overstated. When burdens are placed upon particular classes or individuals, while the majority of the people are exempted, little heed may be paid to the complaints of those affected. Oppression thus becomes possible and lasting. But a burdensome law, operating equally upon all, will soon create a movement for its repeal. With the amendment enforced, a bad or an oppressive State law will not long be left on any statute-book.

The argument that a limitation must be given to the scope of this amendment, because of the circumstances of its origin, is without force. Its authors, seeing how possible it was for the States to oppress, without relief from the Federal Government, placed in the Constitution an interdict upon their action, which makes lasting oppression of any kind by them under the form of law impossible.

The amendment prohibiting slavery and involuntary servitude, except as a punishment for crime, had its origin in the previous existence of African slavery. But the generality of its language makes its prohibition apply to slavery of white men as well as that of black men; and also to serfage, vassalage, villanage, peonage, and every other form of compulsory labor to minister to the pleasure, caprice, vanity, or power of others.

Quoting from the opinion of Chief-Justice Marshall, in the Dartmouth College case, in which the latter laid down the principle that "the case being within the words of the rule, must be within its operation likewise, unless there be something in the literal construction so obviously absurd or mischievous, or repugnant to the general spirit of the instrument, as to justify those who expound the Constitution in making it an exception," Justice Field proceeded as follows:

Following that authority, we can not adopt the narrow view for which counsel contend, and limit the application of the prohibition of the fourteenth amendment to legislation touching members of the enfranchised race. It has a much broader operation. It does not, indeed, place any limit upon the subjects in reference to which the States may legislate. It does not interfere with their police power. Upon every matter upon which, previously to its adoption, they could act, they may still act. They can legislate now, as they always could, to promote the health, good

order, and peace of the community, to develop their resources, increase their industries, and advance their prosperity; but it does require that in all such legislation, hostile and partial discrimination against any class or person shall be avoided; that the States shall impose no greater burdens upon any one than upon others of the community under like circumstances, nor deprive any one of rights which others similarly situated are allowed to enjoy. It forbids the State to lay its hand more heavily upon one than upon another under like conditions. It stands in the Constitution as a perpetual shield against all unequal and partial legislation by the States, and the injustice which follows from it, whether directed against the most humble or the most powerful; against the despised laborer from China, or the envied master of millions. . . . Private corporations are, it is true, artificial persons, but with the sole exception of a [municipal] corporation, with which we are not concerned, they consist of aggregations of individuals united for some legitimate business. . . . It would be a most singular result, if a constitutional provision intended for the protection of every person against partial and discriminating legislation by the States, should cease to exert such protection the moment the person becomes a member of a corporation. We cannot accept such a conclusion. On the contrary, we think that it is well established by numerous adjudications of the Supreme Court of the United States, and of the several States, that whenever a provision of the Constitution, or of a law, guarantees to persons the enjoyment of property, or affords to them means for its protection, or prohibits legislation injuriously affecting it, the benefits of the provision extend to corporations, and that the courts will always look beyond the name of the artificial being to the individuals whom it represents.

After citing the fifth amendment to the Constitution, which declares among other things that "no person shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use without just compensation," Justice Field said:

From the nature of the prohibitions in this amendment, it would seem, with the exception of the last one, as though they could apply only to natural persons. No others can be witnesses; no others can be twice put in jeopardy of life or limb, or compelled to be witnesses against themselves; and, therefore, it might be said with much force that the word person there used in connection with the prohibition against the deprivation of life, liberty, and property without due process of law, is in like manner limited to a natural person. But such has not been the construction of the courts. A similar provision is found in nearly all of the State Constitutions; and everywhere and at all times, and in all courts, it has been held, either by tacit assent or express adjudication, to extend, so far as their property is concerned, to corporations. And this has been because the property of a corporation is in fact the property of the corporators. To deprive the corporation of its property, or to burden it, is in fact to deprive the corporators of their property or to lessen its value. Their interest, undivided though it be, and constituting only a right during the continuance of the corporation to participate in its dividends, and on its dissolution to receive a proportionate share of its assets, has an appreciable value, and is property in a commercial sense; and whatever affects the property of the corporation necessarily affects the commercial value of their interest. If, for example, to take the illustration given by counsel, a corporation created for banking purposes acquires land, notes, stocks, bonds, and money, no stockholder can claim that he owns any particular item of this property, but he owns an interest in the whole of it,



which the courts will protect against unlawful seizure or appropriation by others, and on the dissolution of the company he will receive a proportionate share of its assets. Now, if a statute of the State takes the entire property, who suffers loss by the legislation? Whose property is taken? Certainly the corporation is deprived of its property; but, at the same time, in every just sense of the constitutional guarantee, the corporators are also deprived of their property.

Decisions of State courts, in harmony with the views we have expressed, exist in great numbers. But it is unnecessary to cite them. It is sufficient to add that in all text-writers, in all codes, and in all Revised Statutes, it is laid down that the term person includes, or may include, corporations, which amounts to what we have already said, that whenever it is necessary for the protection of contract or property rights, the courts will look through the ideal entity and name of the corporation to the persons who compose it and protect them, though the process be in its name. All the guarantees and safeguards of the Constitution for the protection of property possessed by individuals may, therefore, be invoked for the protection of the property of corporations. And as no discriminating and partial legislation, imposing unequal burdens upon the property of individuals, would be valid under the fourteenth amendment, so no legislation imposing such unequal burdens upon the property of corporations can be maintained. The taxation, therefore, of the property of the defendant upon an assessment of its value, without a deduction of the mortgage thereon, is to that extent invalid.

An appeal from this decision was taken to the Supreme Court of the United States, where the case was argued toward the close of the year. The importance and far-reaching consequences of its expected opinion can hardly be overestimated, for it will affect not merely the railroad companies of California, but all corporations, other than municipal, throughout the United States.

(For the opinion of the United States Supreme Court on other important constitutional questions, see *POLITICAL ASSESSMENTS AND POWERS OF CONGRESS OVER WITNESSES*; for the interpretation given by the courts to the anti-Chinese law, see *IMMIGRATION*; for the opinions in the Virginia and Louisiana bond cases, see *OBLIGATIONS OF CONTRACTS*.)

**LITERATURE, AMERICAN, IN 1882.**—The productiveness of American literature during the year has been very remarkable. It has exceeded all previous years, in the several departments of human knowledge. As in the past year also, American literary effort has manifested itself in translations of foreign books, and the editing and making additions to English publications for the home market. At the same time it must be confessed that the number of really great and important works of the year has not been as large in proportion as might have been expected.

According to "The Publishers' Weekly," which is regarded as the organ of the American book-trade, the following list gives the approximate numbers of books of various classes issued in 1882 (being 481 more than in 1881, and 1,396 more than in 1880):

CLASS.	No. of works.
Fiction.....	767
Theology and religion.....	826
Juvenile books.....	278

CLASS.	No. of Works.
Law.....	261
Education : language.....	221
Medical science : hygiene.....	188
Description, travel, etc.....	185
Biography, memoirs, etc.....	184
Poetry and the drama.....	182
Literary history and miscellany.....	165
History.....	118
Social and political science.....	112
Physical and mathematical science.....	106
Fine arts : illustrated works.....	91
Useful arts.....	87
Books of reference.....	86
Humor and satire.....	85
Sports, amusements, etc.....	28
Mental and moral philosophy.....	21
Music-books (chiefly singing-books).....	21
Domestic and rural economy.....	20
Total.....	3,472

IN THEOLOGY AND RELIGION there has been about the usual activity on the part of American authors; but it must be admitted that no works of surpassing merit or importance have appeared. American theological scholars and teachers of religion (perhaps even more than others of their countrymen) are forced to compete, not only with each other, but with the entire British press; and the year 1882 has been, like previous years, noted for numerous republications of English works in this department. So long as there is no international copyright law, this must be the regular result. In the way of sermons and lectures American writers have published freely. Among these may be named here, Rev. Alexander Crummell's "The Greatness of Christ, and other Sermons" (New York, T. Whittaker); "Three Hundred Outlines of Sermons on the New Testament," by eminent English and American clergymen (New York, A. C. Armstrong & Son); "Sermons preached in Plymouth Church," by Henry W. Beecher (New York, Fords, Howard & Hulbert), these last marked by all the peculiarities of the somewhat notorious author. To these add Dr. Phelps's "Men and Books, or Studies in Homiletics" (Scribner's Sons), and a new and enlarged edition of Professor Hoppin's "Homiletics" (New York, Dodd, Mead & Co.). The Bedell Lecture for 1881, by Bishop Williams, of Connecticut, entitled "The World's Testimony to Jesus Christ, or The Power of Christianity in developing Modern Civilization," (New York, Putnam's Sons), is one of the most thoughtful and valuable volumes of the year. A number of excellent volumes of sermons and expository works have been reprinted, such as Principal Fairbairn's "Studies in the Life of Christ" (New York, D. Appleton & Co.); W. Robertson Smith's "The Prophets of Israel and their Place in History, to the Close of the Eighth Century, B. C.," a companion volume to his "Old Testament in the Jewish Church" (same publishers); the late Dean Stanley's "Westminster Sermons" (New York, Scribner's Sons); "The Pulpit Commentary," edited by Canon Spence, with the aid of Canon Farrar, Principal Tulloch, and others (New York, A. D. F. Randolph & Co.); Rev. Andrew Jukes's "Types of Genesis" (T. Whittaker);



and "The Second Death and the Restitution of All Things" (same publisher); the late Canon Mozley's valuable "Lectures and other Theological Papers" (New York, E. P. Dutton & Co.); Professor Mahaffy's "The Decay of Modern Preaching" (New York, Macmillan & Co.). Mr. W. R. Hart's "Eternal Purpose, a Study of the Scripture Doctrine of Immortality" (Philadelphia, Lippincott & Co.) has reached a second edition, and is well worth reading. Dr. C. P. Tiele's "History of the Egyptian Religion" (Boston, Houghton, Mifflin & Co.), is a masterly work of its kind, and will repay study. Professor Green's "Moses and the Prophets" (New York, R. Carter & Brothers) is a searching and able review of Robertson Smith's "Old Testament in the Jewish Church" and "Prophets of Israel," and also of Kuenen's "Prophets and Prophecy in Israel." "Christ's Christianity," by Mr. A. H. Walker, is a lawyer's attempt to analyze and arrange, according to subjects, the precepts and doctrines recorded in Matthew, Mark, Luke, and John, as taught by Jesus Christ; it is well worth consulting. So also is Dr. Thomas Hill's "Geometry and Faith," third edition, enlarged (Boston, Lee & Shepard). Mr. O. Van Norden's "The Outermost Rim and Beyond" (New York, A. D. F. Randolph) is a very suggestive contribution toward reverential thought on divine things. The first volume of the "Schaff-Hertzog Encyclopædia of Religious Knowledge" (New York, Funk & Wagnalls) has made its appearance and promises well. Dr. Hurst's "Bibliotheca Theologica" (New York, Scribner's Sons) is a very timely contribution in aid of students and general readers. The second volume of Westcott and Hort's New Testament has been reproduced by Harper & Brothers, and is a necessary adjunct to the volume issued last year. It contains a full account of the principles of criticism, etc., in accordance with which the learned editors arranged the Greek text of the New Testament.

PHILOSOPHY offers a few works this year. Professor Bowne's "Metaphysics" (New York, Harper & Brothers) is very able and noteworthy. Dr. E. J. Hamilton has produced a full and complete treatise on "The Human Mind" (New York, R. Carter & Brothers). Dr. McCosh's "Criteria of Diverse Kinds of Truth, as opposed to Agnosticism," No. I of "Philosophic Series" (New York, Scribner's Sons), is a treatise on applied logic, and, with the numbers to follow, will prove to be timely and useful in the present condition of philosophical thought and study. President N. Porter's collection of papers, chiefly philosophical, under the title "Science and Sentiment," is both interesting and valuable. President Mahan's "Mental Philosophy" (Chicago, Griggs & Co.) is a complete system of mental science, for the use of schools and colleges. A translation of Rudolf Schmid's "The Theories of Darwin" (Chicago, Jansen, McClurg & Co.) presents clearly and forcibly the relation of his the-

ories to philosophy, religion, and morality. It is one of the ablest works of the year. Among republications of foreign contributions to philosophy are, H. Martensen's "Social Ethics" (New York, Scribner & Welford); H. Heine's "Philosophy and Religion in Germany" (Boston, Houghton, Mifflin & Co.); G. S. Morris's "Kant's Critique of Pure Reason" (Chicago, Griggs & Co.), and Professor Watson's "Schelling's Transcendental Idealism" (same publishers). Herbert Spencer continues his labors in "The Principles of Sociology" (Cereemonial and Political Institutions), Vol. II (D. Appleton & Co.).

IN SCIENCE, chiefly physical or natural science, the main supply has been from abroad. "The Concepts and Theories of Modern Physics," by Judge Stallo (New York, D. Appleton & Co.), is a work of superior merit. Professor Le Conte's "Elements of Geology" (same publishers) has appeared in a revised and enlarged edition. "The Stars and the Earth," by Dr. T. Hill (Boston, Lee & Shepard), presents some striking thoughts upon space, time, and eternity. Dr. A. Wilson's "Chapters in Evolution" (New York, Putnam's Sons) is interesting and valuable. So also (same publishers) is Dr. G. M. Beard's "The Psychology of the Salem Witchcraft Excitement, 1692." Specially interesting republications, of a scientific character, are, Sir John Lubbock's "The Origin of Civilization and the Primitive Condition of Man" (fourth edition, with illustrations); "Ants, Bees, and Wasps" (same author); Tyndall's "Essays on the Floating Matter of the Air, in Relation to Putrefaction and Infection," and Professor Huxley's "Science and Culture, and other Essays" (D. Appleton & Co.); A. G. Locke's work on "Gold, its Occurrence and Extraction" (New York, E. & F. N. Spon) is regarded as important and valuable, as is also Spon's "Encyclopædia of the Industrial Arts." Further advance in the applications and uses of electricity has led to the preparing a number of works on this subject. One of the best is "The Modern Applications of Electricity," by E. Hospitalier, translated and enlarged by J. Maier (D. Appleton & Co.). In this connection may be noted Mr. Donnelly's curious and instructive volume, "Ragnarok, the Age of Fire and Gravel" (same publishers); it is well worth reading and examining. "The Popular Science Monthly" (D. Appleton & Co.) maintains its place, and increases in favor with intelligent readers and students.

IN MEDICAL SCIENCE the year's production has been quite as creditable as usual. A considerable portion of the works published is in continuations, or new and revised editions. A few only need here be specified. Dr. William H. Van Buren's "Lectures on Diseases of the Rectum" appear in a second enlarged edition (New York, D. Appleton & Co.). "A Guide to Materia Medica and Therapeutics," by Dr. Robert Farquharson (Philadelphia, H.

C. Lea's Son & Co.), ranks high with the profession, as does also "A Practical Treatise on Operative Dentistry" (Philadelphia, P. Blakiston, Son & Co.). The subject of "Legal Medicine," by Dr. Charles Meynott (New York, W. Wood & Co.), is discussed with care and ability. Dr. Richard Quain's "Dictionary of Medicine, including General Pathology, General Therapeutics, Hygiene, and the Diseases peculiar to Women and Children" (D. Appleton & Co.), is a large volume of nearly 2,000 pages, fully illustrated. Dr. Quain's co-workers are among the most eminent physicians and surgeons in England, and the work is one of superior merit and value. Dr. Courty's "Practical Treatise on the Diseases of the Uterus, Ovaries, and Fallopian Tubes" is translated from the French. It is a work of standard excellence, and has reached a third edition (Philadelphia, P. Blakiston, Son & Co.). The work of Dr. T. Billroth (of Vienna), on "General Surgical Pathology and Therapeutics" (D. Appleton & Co.), has been translated from the fourth German edition, by Dr. C. E. Hackley, of New York. It has further been revised from the eighth edition of the original, and is one of the most valuable books of the year. Strecker's "Short Text-Book of Organic Chemistry" (D. Appleton & Co.), and Dr. Luys's "The Brain and its Functions" (same publishers), deserve mention. In the way of periodicals may be named here, "The New York Medical Journal" (monthly in 1882, announced as weekly in 1883), published by D. Appleton and Co.; also, "The Medical and Surgical Reporter" (weekly), and "The Quarterly Compendium of Medical Science" (Philadelphia, D. G. Brinton, M.D.). Dr. Satterthwaite's "Manual of Histology" (New York, W. Wood & Co.), Dr. Bartholow's "Medical Electricity," and "Treatise on Hypodermic Medication" (Philadelphia, J. B. Lippincott & Co.), deserve mention, as also Dr. Clapp's "Is Consumption Contagious? and can it be Transmitted by Food and Drink?"

Works on Law and Government number very largely this year. As heretofore, codes, digests, statutes, etc., are added to the literature of 1882 in this department, and increase its value at home as well as abroad. The 104th volume of the United States Supreme Court, seven volumes of Circuit Court reports, and one volume of New York District Court reports, show the importance of the Federal tribunals. Twenty or more States and Territories have published one or more volumes of the decisions of their highest courts, besides numerous volumes relating to the work of inferior courts. "American Decisions" and "American Reports" are steadily increasing in number of volumes. "Digests" and "Indexes" are also freely furnished, and are becoming a necessity amid the bewildering increase from year to year of law publications. Pomeroy's "Equity Jurisprudence" (San Francisco, A. L. Bancroft & Co.) has reached a

second volume, and sustains its high reputation. Dr. F. Wharton's "Commentary on the Law of Contracts" (Philadelphia, Kay & Brothers) is a very thorough treatise in two volumes. "The Principles of the Law," by A. J. Willard, is a careful examination of the law of personal rights, to discover the principles of the law, as ascertained from the practical rules of the law, and harmonized with the nature of social relations (D. Appleton & Co.). "The Marriage and Divorce Laws of the United States," by Charles Noble (New York, Baker, Voorhis & Co.), treats of a most perplexing topic in these days. Add to this Woolsey's "Essay on Divorce and Divorce Legislation, with Special Reference to the United States" (New York, Scribner's Sons). "Trial of Title to Land," by A. G. Sedgwick and F. J. Wait, "A Treatise on the Law and Practice of Voluntary Assignments," by A. M. Burrill (same publishers), and Justice Shea's little volume, "The Nature and Form of the American Government founded in the Christian Religion" (Boston, Houghton, Mifflin & Co.), deserve honorable mention, without disparagement, however, to other works which our limits do not admit of naming. The "Albany Law Journal" has reached its twenty-sixth year. A "Journal of Banking Law" has been commenced, and hereafter "The Southern Law Review" will be merged in "The American Law Review" (St. Louis, Missouri).

Though BIOGRAPHY, MEMOIRS, etc., fall short considerably, in number, of the previous year's production, yet in quality and interest they are quite equal. To the series of "American Men of Letters" there have been added Scudder's "Noah Webster," Sanborn's "H. D. Thoreau," Frothingham's "George Ripley," and Lownsbury's "J. Fenimore Cooper" (Boston, Houghton, Mifflin & Co.); and the "American Statesmen Series" now numbers five volumes, viz., Morse's "John Quincy Adams," Lodge's "Alexander Hamilton," Von Holst's "John C. Calhoun," Sumner's "Andrew Jackson," and Adams's "John Randolph" (same publishers). "The Life and Letters of Francis Lieber" (Boston, J. R. Osgood & Co.) form an interesting and instructive volume, as also F. H. Underwood's "Henry Wadsworth Longfellow" and "James Russell Lowell" (same publishers). Mrs. S. C. Bull gives a very readable memoir of her husband, "Ole Bull," the famous violinist (Houghton, Mifflin & Co.), and the poet Whittier furnishes a pleasant biographical introduction to the "Letters of L. Maria Child" (same publishers). "The Life and Letters of Elizabeth Prentiss" (New York, A. D. F. Randolph & Co.) make an attractive volume, well worth reading; so also Mr. Blaine's "Eulogy on James Abram Garfield" (Boston, J. R. Osgood & Co.) is an eloquent presentation of the lamented martyr-President. With this last should be joined H. C. Pedder's "Garfield's Place in History" (New York, Putnam's



Sons). In the way of reprints, the series "English Men of Letters" has had added to it Morrison's "Macaulay," Jebb's "Bentley," Ward's "Dickens," Gosse's "Gray," Traill's "Sterne," and Stephen's "Swift" (New York, Harper & Brothers), all of them well done and sustaining the reputation already gained by the series. To these add the "Philosophical Classics and Foreign Classics for English Readers" (Philadelphia, J. B. Lippincott & Co.); new volumes, viz., Hasell's "Tasso," Wallace's "Kant," Sime's "Schiller," Collins's "La Fontaine and other French Fabulists," Alex. Bain's "James Mill" and "John Stuart Mill" are valuable additions to the biographies of the year (New York, H. Holt & Co.). To these may be joined Thomas Mozley's rather rambling but instructive "Reminiscences, chiefly of Oriol College and the Oxford Movement" (Boston, Houghton, Mifflin & Co.), and the Hon. J. Bigelow's "Molinos, the Quietist" (Scribner's Sons), a very striking monograph, well worth the student's examination.

In HISTORY, the chief American work comes from the venerable George Bancroft. His "History of the Formation of the Constitution of the United States" is an elaborate production, properly in continuance of his life-work on American history (New York, D. Appleton & Co.). There has also appeared Volume I of an entirely new edition of his "History of the United States," partly rewritten and thoroughly revised: it is to be published in six volumes (same publishers). "The History of the Negro Race in America," by George W. Williams (New York, Putnam's Sons), is an interesting and valuable addition to historical literature. Admiral Preble's "History of the Flag of the United States," copiously illustrated (Boston, J. R. Osgood & Co.), has reached a third edition. Mr. H. H. Bancroft has published Volume I of the "History of Central America" (San Francisco, A. L. Bancroft & Co.), being a continuation of his former valuable work on "The Pacific States." J. A. Doyle's "English Colonies in America: Maryland, Virginia, and the Carolinas" (New York, H. Holt & Co.), is a work of merit; so, also, are Reed's "Vicksburg Campaign" (Cincinnati, R. Clarke & Co.), Sterne's "Constitutional History of the United States" (Cassell & Co.), and Volumes V-X of "The Campaigns of the Civil War" (New York, Scribner's Sons), by Palfrey, Doubleday, Cox, etc. Dr. Stillé's "Studies in Mediæval History" (Philadelphia, J. B. Lippincott & Co.) is highly spoken of by competent judges. Among valuable English works in history reproduced are W. E. H. Lecky's "History of England in the Eighteenth Century," Volumes III and IV (D. Appleton & Co.), G. Rawlinson's "Sixth and Seventh Oriental Monarchies" and "History of Ancient Egypt" (New York, Dodd, Mead & Co.), John Richard Green's "Making of England" (Harper & Brothers), Walpole's "History of the Kingdom of Ireland" (same publishers), and Rev. M. Creighton's "History of the Papacy

during the Reformation" (Boston, Houghton, Mifflin & Co.).

In EDUCATION, LANGUAGE, etc., the steady production keeps pace with the demand. New text-books in the classics and modern languages, as well as new and revised editions of existing books, are noticeable as usual, to an extent quite beyond our limits to specify. Professor A. H. Welsh's "Development of English Literature and Language" (Chicago, S. C. Griggs & Co.) is a very valuable contribution to the subject of which it treats. Mr. B. Tuckerman's "History of English Prose Fiction" (New York, Putnam's Sons) is also valuable; and Miss Washburne's "Studies in Early English Literature" (same publishers) is pleasing and instructive. Mr. Appleton Morgan has replied to his critics, in a small volume, "Some Shakespearean Commentators" (Cincinnati, R. Clarke & Co.), but the *oxæta quæstio* remains as unsettled as ever. Longley's "American Phonographic Dictionary" (same publishers) and "Manual of Phonography" are highly commended; so also is G. H. Thornton's "Modern Stenographer" (New York, D. Appleton & Co.). Of works from abroad which are valuable additions to our stock of literature, may be named here, Professor Hodgson's "Errors in the Use of English" (D. Appleton & Co.); H. Morley's "English Literature in the Reign of Victoria" (Putnam's Sons); Principal Shairp's "Aspects of Poetry" (Boston, Houghton, Mifflin & Co.); Rev. E. M. Wherry's "Comprehensive Commentary on the Quran" (same publishers); Carl Abel's "Linguistic Essays" (same publishers). The making of English Dictionaries continues, and seems likely to continue *ad Græcos calendas*. Professor Skeat's "Etymological Dictionary of the English Language" (Macmillan & Co., and, in concise form, Harper & Brothers) is a noteworthy effort to attain greater accuracy and precision in the matter of etymology. Mr. H. Wedgwood, however, sharply questions the professor's success in many cases, in his "Contested Etymologies in the Dictionary of Rev. W. W. Skeat" (Boston, J. R. Osgood & Co.). A further great effort is being made, in publishing Dr. Ogilvie's "Imperial Dictionary of the English Language," revised and augmented by C. Annandale. It is to be in four octavo volumes, with more than 3,000 illustrations, published by "The Century Company," New York, at the close of 1882. To these should be added Poole's "Index to Periodical Literature" (Boston, J. R. Osgood & Co.), which is indispensable to literary men, and the carefully prepared "Bibliotheca Americana," or catalogue of books relating to American topics, etc. (Cincinnati, R. Clarke & Co.).

POLITICAL ECONOMY and SOCIAL SCIENCE, from the practical character of the times, call for full consideration, and are largely inquired into both here and in England. Herbert Spencer contributes a second volume of his elaborate treatise on the "Principles of Sociology" (D.

Appleton & Co.). Two more volumes have been added to the excellent collection entitled "Appletons' Home Books," and Mr. F. B. Hawley's "Capital and Population" (same publishers) is a timely study of the economic effects of their relations to each other. "The Social Law of Labor," by W. B. Weedon (Boston, Roberts Brothers), is a very creditable discussion of this important topic. Professor D. B. King's "The Irish Question" is an earnest contribution to the settlement of a question that puzzles the wisest heads (Scribner's Sons). In a second series of the "Library of Political Education" (New York, Putnam's Sons) are furnished a "History of Political Economy in Europe," by J. A. Blanqui; "Money and the Mechanism of Exchange," by Professor Jevons, and "On Liberty," by J. S. Mill. To these add Dr. O'Dea's "Suicide, Studies on its Philosophy, Causes, and Prevention," and Mr. W. H. Mallock's "Social Equality, a Study in a Missing Science" (same publishers), the latter characterized by the well-known peculiarities of style and speculation of the author. As connected with the subject should be added Mrs. Wittemayer's "History of the Woman's Temperance Crusade," and Mrs. Stanton's and Miss Anthony's second volume of the "History of Woman's Suffrage."

As regards POETRY, the DRAMA, etc., the year presents hardly anything of much note. The poet Longfellow passed away during 1882, leaving his "In the Harbor" and "Ultima Thule" as the latest of his gifts to song. Mr. De Kay is author of "The Vision of Esther," being a sequel to his "Vision of Nimrod" (D. Appleton & Co.). "Christine" is a poem by T. B. Read, and is worthy of his reputation (Philadelphia, J. B. Lippincott & Co.). "Monte Rosa," by J. H. Nichols (Boston, Houghton, Mifflin & Co.), is really what he terms it, "The Epic of an Alp." Mr. A. B. Alcott's "Poems and Sonnets" (Boston, A. Williams & Co.) are admired by readers of this kind of poetry, as are also Miss Mary Clemmer's "Poems of Life and Nature" (Boston, J. R. Osgood & Co.), and Miss M. E. Sangster's "Poems of the Household" (same publishers). Mr. G. H. Calvert's "Life, Death, and other Poems" (Boston, Lee & Shepard) have been received with much favor. Across the water, Tennyson, Browning, and Swinburne have each done something, though not specially distinguished. In the way of new editions, collections of poems, etc., a good deal has been accomplished. Longfellow's poetical works are now furnished in complete form (Houghton, Mifflin & Co.); so also the complete poems of T. B. Aldrich and J. G. Saxe (same publishers). Mr. C. A. Dana has thoroughly revised and considerably enlarged "The Household Book of Poetry" (D. Appleton & Co.). Miss C. F. Bates has compiled a choice volume entitled "The Cambridge Book of Poetry and Song" (Boston, T. Y. Crowell). The indefatigable Martin Farquhar Tupper has supplied his admirers with "Three

Five-Act Plays and Twelve Dramatic Scenes." It would be tedious to put on record the number and description of new editions of Shakespeare, Milton, Scott, and others—"names which were not born to die."

Works on ART, the FINE ARTS, MUSIC, etc., are not very numerous, though on the whole creditable and useful. "The History of Wood Engraving in America," by W. J. Linton (Boston, Estes & Lauriat), treats of a subject of special interest at this date. As complementary to this has appeared Mr. G. E. Woodberry's "History of Wood Engraving," which deals with the subject at large (New York, Harper & Brothers). Amory's "Domestic and Artistic Life of John Singleton Copley" (Boston, Houghton, Mifflin & Co.) is spirited and useful. Commander Gorringe has supplied an interesting volume on "Egyptian Obelisks" (New York, Putnam's Sons). J. W. Mollett's "Illustrated Dictionary of Words used in Art and Archeology" (Houghton, Mifflin & Co.) is very full and valuable. To these may be added E. Fromentin's "Old Masters of Belgium and Holland," translated by Mrs. M. C. Robbins (J. R. Osgood & Co.); H. Bacon's "Parisian Art and Artists" (same publishers); C. Yriarte's "Florence, its History, the Medici, its Scholars, Architecture, Painting, Sculpture," etc. (New York, Scribner & Welford); A. Challengel's "History of Fashion in France," giving an account (with colored plates) of the dress of women from the Gallo-Roman period to the present time (same publishers); M. H. Bloxam's "Principles of Gothic Architecture" (same publishers); F. von Reber's "History of Ancient Art" (New York, Harper & Brothers); G. W. Sheldon's "Hours with Art and Artists" (D. Appleton & Co.); "Our Native Land," or glances at American scenery and places, etc. (same publishers); Loomis's "Index Guide to Travel and Art Study in Europe" (New York, C. Scribner's Sons); and Miss Knowlton's "Hints for Pupils in Drawing and Painting" (Houghton, Mifflin & Co.).

In the way of TRAVEL and ADVENTURE the books of 1882 compare favorably with those of the preceding year. G. F. Godfrey's "Sketch of Bangor" (Boston, J. R. Osgood & Co.) is interesting and instructive; as also are Baillie-Grohman's "Camps in the Rockies" (Scribner's Sons), and W. Nash's "Two Years in Oregon" (D. Appleton & Co.). W. E. Griffis tells in a very capital way the story of "Corea, the Hermit Nation" (Scribner's Sons); and the Rev. Titus Coan presents an interesting autobiographic sketch of mission life and labors in his "Life in Hawaii" (New York, A. D. F. Randolph); Miss C. A. Baker's "A Summer in the Azores," with a glimpse of Madeira (Lee & Shepard), is very pleasant reading; and Lieutenant Danenhower has given an instructive "Narrative of the Jeanette" (J. R. Osgood & Co.). Coming from writers across the ocean are a goodly number



of capital books in this department; as, H. Lansdell's "Through Siberia" (Houghton, Mifflin & Co.); E. O'Donovan's "The Merv Oasis" (Putnam's Sons); E. de Amicis's "Moroce, its People and its Places"; E. Stack's "Six Months in Persia" (same publishers); the Chevalier de Hesse-Wartegg's "Tunis, the Land and the People" (New York, Dodd, Mead & Co.); Dr. W. M. Thomson's "Central Palestine and Phœnicia" (Harper & Brothers).

**JUVENILES.**—Of books prepared specially for young people, the number this year is considerably less than in 1881. A few only need here be named. "Boys in the Mountains and on the Plains," by W. H. Rideing (New York, D. Appleton & Co.), is a capital book of adventures, and abounds in instruction. "Building the Nation," by O. C. Coffin (New York, Harper & Brothers), is equally interesting and useful; "Boy Travelers in the Far West," by J. W. Knox (same publishers), is another volume in continuation of previous labors in this field. To this add "Our Young Folks in Africa," by J. D. McCabe (Philadelphia, J. B. Lippincott & Co.). "The Young Moose-Hunters" (Boston, Estes & Lauriat) is a stirring book of boys' adventures in Maine; and "Six Girls" (same publishers) is a charming book for girls. "Drake, the Sea-King of Devon," by G. M. Towle (Boston, Lee & Shepard), is a further volume of the "Young Folks' Heroes of History," by the same author. W. Black's "Four Macnicals"; T. W. Knox's "Young Nimrods around the World"; J. Otis's "Mr. Stubbs's Brother" (Harper & Brothers), are well worth reading. Add to these "The Princess and Curdie," a new juvenile by George MacDonald (J. B. Lippincott & Co.); Miss Yonge's "Little Duke," "Prince and Page," "Golden Deeds," "Lances of Linwood," 4 volumes (Boston, D. Lothrop & Co.); "Little Bullets," by A. L. O. E. (New York, R. Carter & Brothers); new edition of Hans Andersen's "Fairy Tales" (New York, Scribner & Welford).

In **FICCIÓN**, the production of the year has been unusually large and various, not only from native writers, but also from republications of English novels and tales, and translations from German and French authors. "A Modern Instance," by W. D. Howells (Boston, J. R. Osgood & Co.), is regarded as very effective. Miss C. Reid's "Heart of Steel" (New York, D. Appleton & Co.) is much praised for skill and spirit. Bret Harte, in his "Flip and Found at Blazing Star" (Houghton, Mifflin & Co.), continues to please numerous readers; and Judge Tourgee, in "John Eax" (New York, Fords, Howard & Hulbert), presents, as he claims, "the South without the shadow." In "Mr. Isaacs" (Macmillan & Co.), the writer, J. Marion Crawford, gives a very interesting tale of modern India. "The Marquis of Carabas," by Harriet P. Spofford (Boston, Roberts Brothers), is very well done; as are also Miss Woolson's "Anne" (Harper & Brothers);

Miss E. S. Phelps's "Doctor Zay" (Houghton, Mifflin & Co.); Miss Warner's "Nobody" (New York, R. Carter & Brothers); and Miss S. May's "Janet, a Poor Heiress" (Boston, Lee & Shepard).—Among books of this kind from English writers may be named here F. Anstey's "Vice Versa; or, A Lesson to Fathers" (D. Appleton & Co.); George MacDonald's "Weighed and Wanting" (Boston, D. Lothrop & Co.); Miss C. Yonge's "Unknown to History" (Macmillan & Co.); J. S. Shorthouse's "John Inglesant" (same publishers); James Payn's "Kit, a Memory" (Harper & Brothers); W. C. Russell's "The Lady Maud," and "My Watch Below" (same publishers); Miss G. M. Craik's "Fortune's Marriage" and Mrs. Oliphant's "Lady Jane" (same publishers); Ouida's "In Maremma, a Tale of Italian Life" (Philadelphia, J. B. Lippincott & Co.); R. Buchanan's "God and the Man" (Harper & Brothers); "A Little Pilgrim," reprinted from "Macmillan's Magazine" (Boston, Roberts Brothers).—A goodly number of translations have been made during the year. Of these brief mention may be made. Björnson's "Novels and Tales," in four volumes, have been rendered into English by Professor R. B. Anderson (Boston, Houghton, Mifflin & Co.), and are highly esteemed. "Plish and Plum" is from the German of Busch, by C. T. Brooks (Boston, Roberts Brothers). "A Noble Name, or Dönningshausen," is from the German of Von Glümer, by Mrs. Wister (Philadelphia, J. B. Lippincott & Co.). "The Romance of a Mummy" is from the French of T. Gautier, by Miss A. M. Wright (same publishers). "Abbé Constantine" is from the French of M. Halévy (New York, Putnam's Sons). Also Franzos's "The Jews of Barnow," from the German, by M. W. Macdowall (D. Appleton & Co.); E. Pouillon's "Cisette," from the French, by C. W. Woolsey (New York, G. P. Putnam's Sons); and "The New Arabian Nights," translated and edited by W. F. Kirby (Philadelphia, J. B. Lippincott & Co.).

**LITERATURE, BRITISH, IN 1882.**—Literary productiveness in Great Britain this year shows somewhat of a falling off from that of 1881. This is attributed to the extraordinary activity which prevails in the departments of journalism and periodical literature, and which necessarily makes inroads upon the time and attention of readers of books. "There is no standing out against the statistics, as we find them" (says the editor of the London "Publishers' Circular"), "but considering the variety and extent of the rival demands upon attention, the real wonder is that the effect is not more marked. As matters are, it is not improbable that the real value of the literary works of 1882, whether viewed from an intellectual or from a material stand-point, is superior to that of its forerunners." From the same source is obtained the following analytical table, which gives the numbers of books issued in 1882 (being 282 less than in 1881):

CLASS.	No. of works.
Juvenile works and tales.....	987
Theology, sermons, etc.....	689
Miscellaneous (year-books, serials in volumes, etc.)....	625
Educational.....	525
History, biography, etc.....	452
Novels, tales, and other fiction.....	430
Arts, sciences, etc.....	344
Voyages, travels, etc.....	244
Political and social science.....	189
Poetry and the drama.....	181
Medicine, surgery, etc.....	177
Belles-lettres, essays, etc.....	106
Law and jurisprudence.....	75

Total..... 5,124

NOTE.—Of these, 3,978 are new books, and 1,146 are new editions.

IN THEOLOGY and RELIGIOUS LITERATURE in general, there is not much of special value or importance to be noted. Exegetical works number about as usual. The "Speaker's Commentary," under the able editorship of Canon Cook, has reached its completion, and contains much of the ablest talent and profound learning in the Established Church. Rev. W. F. Deane's "The Book of Wisdom; the Greek Text, the Latin Vulgate, and the Authorized Version," with introduction, commentary, etc., is a work of much value (Oxford, University Press). A number of other works in this department, some covering the whole Bible, others devoted to separate books of the Old and New Testaments, have been published; as, "The Bible Commentary for English Readers," edited by Bishop Ellicott, with the aid of a number of scholars and divines, three volumes on the New Testament, two volumes on the Old (Cassell, Petter, Galpin & Co.); Rev. M. F. Sadler's "St. Matthew's Gospel," with notes (George Bell & Sons); a new and rather striking work entitled "The Apostolic Liturgy and the Epistle to the Hebrews, being a Commentary on the Epistle and its Relation to the Holy Eucharist, with Appendices on the Liturgy of the Primitive Church," by John Edward Field (Rivingtons). New and revised editions of standard works devoted to exegesis of Holy Scripture have been issued; as, Adam Clarke's Commentary on the Bible, six volumes; Archbishop Trench's "Notes on the Miracles and on the Parables, Studies in the Gospels," etc.; Davidson's "Introduction to the New Testament" (Longmans & Co.). Much attention has been given to CHURCH HISTORY. Rev. J. H. Blunt has published the second volume of his elaborate work, "The Reformation of the Church of England, its History, Principles, and Results," 1547-1662 (Rivingtons). The first volume was published in 1870, covering from 1514-1547. Rev. M. Creighton's "History of the Papacy during the Period of the Reformation, 1378-1464" (Longmans & Co.) is a valuable contribution. Canon Farrar's "Early Days of Christianity" (Cassell & Co.) has all the charms of style and liveliness of narration of his previous works. "Ecclesia Anglicana," by Rev. A. C. Jennings (Rivingtons), is a concise history of the Church of Christ in England from the earliest to the present times, and is a work of passable merit.

"Notes on the Canons of the First Four General Councils," (H. Frowde, Oxford, Clarendon Press), by Dr. Bright, is a very valuable little volume. In RELIGIOUS BIOGRAPHY may be noted Dr. Cutts's "Constantine the Great, the Union of the State and the Church" (Society for Promoting Christian Knowledge); Mr. M. Rule's "Life and Times of St. Anselm, Archbishop of Canterbury and Primate of the Britains" (Kegan Paul, Trench & Co.); Rev. S. Kettlewell's "Thomas à Kempis, and the Brothers of Common Life"; and the third and concluding volume of the "Life of Bishop Wilberforce, by his Son" (John Murray). The mooted subject of eternal punishment received much attention this year from Canon Farrar, Rev. F. N. Oxenham, and Rev. A. Jukes (new editions). As to RELIGIONS of the world (non-Christian), it suffices to name Kuenen's "National Religions and Universal Religions"; Hibbert Lectures, 1882 (Williams & Norgate); A. Barth's "Religions of India" (Trübner & Co.); and "The Faiths of the World" (Blackwood & Sons), being the St. Giles's Lectures, by Caird, Flint, Milligan, etc., and giving a concise history of the great religious systems of the world.

IN BIOGRAPHY and HISTORY combined, there has been about the usual activity. The elaborate work of C. Yriarte, entitled "Florence: its History; the Medici, the Humanists, Letters, Arts," has been translated by Mr. C. B. Pitman (Sampson Low, Marston & Co.); it is splendidly illustrated, and quite equals the "Venice" by the same author. Professor Max Duncker's "History of Antiquity," translated by Evelyn Abbott, has been completed in the sixth and concluding volume (Bentley & Son). Sir A. Alison's "Some Account of my Life and Writings" (Blackwood & Sons) is lively and valuable. "Memoir of Augustus De Morgan," by his wife (Longmans & Co.), is well worth reading; as are also "The Friendships of Mary Russell Mitford, as recorded in Letters from her Literary Correspondents," edited by Rev. A. G. L'Estrange (Hurst & Blackett); volume iii of the "Foreign Secretaries of the Nineteenth Century" (W. H. Allen & Co.); "Memories of Old Friends, being Extracts from the Journals and Letters of Caroline Fox, of Penjerick," edited by Horace N. Pym (Smith, Elder & Co.); the "Autobiography of Prince Metternich," edited by his son (Bentley & Son); "Raphael, his Life, Work, and Times," from the French of Eugene Muntz (Chapman & Hall); "Recollections of Dante Gabriel Rossetti," by T. H. Caine (Stock); "The Salon of Madame Necker," by Vicomte d'Haussonville, from the French, by H. M. Trollope (Chapman & Hall).

IN the way of TRAVEL and ADVENTURE English men and women show themselves as active and persevering as ever. A few volumes only can here be named; as, Laurence Oliphant's "The Lands of Khemi" (Blackwood & Sons); "Magyarland," a lady's charming nar-



rative of travels through the snowy Carpathians and Great Alfold of the Magyar (Sampson Low, Marston & Co.); Mr. Felkin's and Mr. Wilson's "Uganda and the Egyptian Soodan" (same publishers); E. O'Donovan's "The Merv Oasis," being travels and adventures east of the Caspian during the years 1879-'81, including five months among the Tekkes of Merv (Smith, Elder & Co.); W. G. Dixon's "The Land of the Morning, an Account of Japan and its People, based on a Four Years' Residence in that Country, including Travels into the Remotest Parts of the Interior" (Edinburgh, Gemmell); Rev. Henry Lansdell's "Through Siberia," being a journey of 8,000 miles from the Urals to the Pacific, on the rivers Obi, Amur, and Ussuri, and by the hire of 1,000 horses (Sampson Low, Marston & Co.); Mrs. Macintosh's "Damascus and its People; Sketches of Modern Life in Syria" (Seeley); Lady Brassey's "Tahiti," with illustrations (Sampson Low, Marston & Co.); E. C. Baber's "Travels and Researches in Western China" (Murray); G. A. Sala's "America Revisited, from the Bay of New York to the Gulf of Mexico, and from Lake Michigan to the Pacific," including the author's experience among the Mormons of Salt Lake City (Vizetelly & Co.); C. L. Norris-Newman's "With the Boers in the Transvaal and Orange Free State in 1880-'81" (W. H. Allen & Co.); A. Gallenga's "Summer Tour in Russia" (Chapman & Hall).

As usual, SCIENCE receives a large share of attention. "Water and its Teachings in Chemistry, Physics, and Physiography," by C. L. Morgan, is a very suggestive and useful handbook (E. Stanford). "The Sun, its Planets and Satellites," by Rev. E. Ledger, is the Gresham Lectures for 1881-'82, upon the Solar System (same publisher). "Notes on Evolution and Christianity," by J. F. Yorke, is well worth consulting, though hardly satisfactory (Kegan Paul, Trench & Co.). "Modern Physical Fatalism, and the Doctrine of Evolution," by Professor T. R. Birks, is very thorough, including an examination of Herbert Spencer's "First Principles"; new edition, with replies to strictures by Spencer and Pritchard (Macmillan & Co.). "Myth and Science," by Tito Vignoli, is interesting and valuable. It is one of the "International Scientific Series," republished by D. Appleton & Co. (Kegan Paul, Trench & Co.). "Permanence and Evolution," by J. E. B. Bouvier-Pusey, and "The Creed of Science, Religious, Moral, and Social," by W. Graham (same publishers), are clearly and thoroughly wrought out. Mr. Pusey's inquiry into the supposed mutability of animal types is very valuable.

Works on ART, in the general sense of the term, are considerably less in number this year than in 1881. "The Graphic Arts, a Treatise on the Varieties of Drawing, Painting, and Engraving, in Comparison with each other and with Nature," by P. G. Hamerton (Seeley, Jackson & Halliday), is very carefully prepared,

and ranks as one of the very best books of its kind. "Raphael, his Life and Works; with Particular Reference to Recently Discovered Records," by J. A. Crowe and G. B. Cavalcasse (John Murray), is an exhaustive study of extant drawings and pictures. The very valuable "Dictionary of Music and Musicians, A. D. 1450-'82," edited by Dr. George Grove, has been completed by the publication of vol. iii (Macmillan & Co.). "A New History of the English Stage," by P. Fitzgerald (Tinsley & Brothers), from the Restoration onward, deals specially with the patent theatres, and is much praised by the critics. Sir Charles Wilson's "Picturesque Palestine, Sinai, and Egypt," vol. iii, is a magnificent work of art (J. S. Virtue & Co.). "Hopes and Fears for Art," by W. Morris (Ellis & White) is a series of five lectures, admirably setting forth the theme chosen by the writer.

Contributions to POETRY have been few and of small consequence this year. Mr. Swinburne has published a volume, "Tristram of Lyonesse, and other Poems" (Chatto & Windus), which fully sustains his reputation. Tennyson and Mr. and Mrs. Browning have each done something, but not much, for the honor of the Muses in 1882. Edwin Arnold's "The Light of Asia, or the Great Renunciation" (Trübner & Co.), is an enthusiastic laudation of the life and teaching of Gautama, Prince of India, and founder of Buddhism. The poem has been much praised and also severely criticised. Mr. A. Lang, translator of "The Odyssey" of Homer, has published a volume entitled "Helen of Troy" (George Bell & Sons), which is very creditable to his scholarship and poetic skill; and Mr. A. Austin has produced some charming lyrical poems, entitled "Soliloquies in Song" (Macmillan & Co.). In this connection may be named Francis Bacon's "The Promus and Formularies and Elegancies," being private notes, *circa* 1594, hitherto unpublished; illustrated and elucidated by Mrs. Henry Pott, with preface by E. A. Abbott (Longmans). It is the latest effort in favor of the claim made in behalf of Bacon that he wrote the plays, or the chief plays, which thus far have been attributed to William Shakespeare's genius and ability. So far as appears, the present volume is not likely to do much toward a settlement of the several questions at issue.

In HISTORY, besides those already named under Church History and Biography, a few contributions may be specified. Mr. E. A. Freeman, in his "Reign of William Rufus and the Accession of Henry I" (Oxford, Clarendon Press), has made a valuable addition to the department of history, in which he is justly esteemed a master; and Mr. J. R. Green, in "The Making of England," has shown the same admirable skill and ability as in his well-known "History of the English People" (Macmillan & Co.). "The Indian Empire; its History, People, and Products" (Trübner & Co.),

by Dr. W. W. Hunter, is regarded as a full and exhaustive account of that important portion of the British Empire. Mr. C. A. Fyffe (the first volume of whose work was noticed last year) has continued his labors on "The History of Modern Europe" with much success. It promises, when completed, to become a standard history of the period to which it is devoted. Messrs. Gairdner's and Spedding's "Studies in English History" (Edinburgh, Douglas), are full of suggestive and interesting matter. The year has also been noted for numerous republications and new editions of histories and biographies; such as, Dr. Lingard's "History of England," Guizot's "History of France," eight vols., Thiers's "History of the French Revolution, 1789-1801," five vols.; "The Life and Speeches of the Right Hon. John Bright," Bishop Wordsworth's "Greece, Pictorial, Descriptive, and Historical," Sir G. W. Cox's "Mythology of the Aryan Nations," "The Life of Richard Cobden" (Chapman & Hall), Sir E. Creasy's "The Fifteen Decisive Battles of the World," and "History of the Ottoman Turks, from the Beginning of their Empire to the Close of 1878" (R. Bentley & Son). To these add, for general use, the enlarged, corrected, and revised edition of Haydn's "Dictionary of Dates, relating to all Ages and Nations" (Ward, Lock & Co.).

JUVENILE WORKS and TALES are very numerous this year, many of them of superior quality, and many also of only moderate value. In number they are almost, if not quite, double those published in 1881. On the other hand, that kind of *fiction*, usually designated as *novels*, is less in quantity than last year; but, whether it excels in quality or not, is not quite clear. A few only of these can here be named. Mr. T. Hardy's "Two on a Tower" (Sampson Low, Marston & Co.) is unique and slightly fantastical. W. Besant's "The Revolt of Man" (W. Blackwood & Sons) is undoubtedly clever and amusing in these days of disputed sovereignty between man and woman. Mrs. M. O. W. Oliphant's "In Trust, the Story of a Lady and her Lover" (Longmans & Co.), fully meets the expectations of her admirers. Mr. Buchanan's "God and the Man" (Chatto & Windus) is, as might be expected from the title, rather startling, but the writer works out his theme with power and skill beyond what is usually met with in novels. Mr. Shorthouse's "John Inglesant" (Macmillan & Co.) has met with very general favor, and is regarded as one of the ablest books of the year. So, also, Georg Ebers's new novels, "Only a Word," and "The Burgomaster's Wife" (same publishers), translated by Clara Bell, are held to be equal to his former work, "The Egyptian Princess."

The sciences of LAW and MEDICINE have received their usual share of attention. The former need not be dwelt upon here, as books of this kind are generally of local character and importance. A number of valuable publications in *medicine*, *surgery*, etc., appeared,

and new and enlarged editions of standard works have been published. Dr. Tidy's "Legal Medicine, including Evidence," Part I (Smith, Elder & Co.), is new, and treats of an important topic. Dr. H. A. Reeves's "Human Morphology, a Treatise on Practical and Applied Anatomy," volume i (same publisher), is much esteemed, as is also Dr. Aitken's "Outlines of the Science and Practice of Medicine" (C. Griffin). Dr. J. D. Macdonald, of the British Navy, has furnished an excellent work entitled "Outlines of Naval Hygiene" (Smith, Elder & Co.). Dr. Gamgee's "Vivisection and Human Surgery" (J. A. Churchill) has reached a second edition; and Dr. W. Turner's "Introduction to Human Anatomy" (A. & C. Black) appears in a new edition. The great "Dictionary of Medicine," by various eminent writers, edited by Dr. Quain, maintains its position in the esteem of medical men. Watts's well-known and valuable "Dictionary of Chemistry, and the Allied Branches of other Sciences" (Longmans & Co.), has a supplement furnished, containing important discoveries in 1879-'80; the work is complete in nine volumes.

In conclusion, it may be stated that, as was predicted last year, the American fashion of cheap issues of books, in various departments of literature and science, has made its way in England to a large extent. "Sixpenny" literature is markedly on the increase, and not only novels and tales are issued in this form, but works of value and high character. Its ultimate effect, however, whether for good or ill, remains to be seen, and, if any are alarmed at the prospect, they may take comfort in the belief that the conservative character of the British way of looking at things will keep publishers from going too far, or risking too much, in this direction.

LITERATURE, CONTINENTAL, IN 1882. The record for the year evinces about the same activity in the several branches of literature as in previous years. A brief *résumé*, without going into details, will make this plain. We begin, as heretofore, in alphabetical order of countries.

BELGIUM.—Works referring to the history of the country rank first both in number and importance. M. Poulet's "Histoire Politique Nationale" traces the origin and history of the institutions of the Netherlands before the French Revolution. Volume I comes as far as the fourteenth century. M. Namèche's "Cours d'Histoire Nationale" has reached its ninth volume, which gives the history of the beginning of the reign of Charles V. Local histories are numerous—too numerous to give even the titles. They show much activity and research on the part of the writers, and are creditable to the people who encourage and support such studies. The "Bibliotheca Belgica," of Vanderhagen, is making steady progress. A national "Bibliography" (1880-'80) has been commenced, valuable documents have been printed, and the very instructive "Report of



the Parliamentary Committee on Primary Education and Schools" has been published by order of the Government. Other subjects have received due attention; such as political economy, popular rights, social questions, the fine arts, etc. Several monographs on this latter are regarded as very valuable, and the Royal Academy continues to publish works of ancient writers of the country. M. F. Van den Branden is still at work on his elaborate "History of the Antwerp School of Painting." Decker's "History of the Malcontents in the Netherlands, Sixteenth Century," though crowned by the Academy, is pronounced by critics to be weak and prejudiced. Poetry has been fruitful this year. Collections have been made by Pol de Mont, Beernaert, Callant, and others. A drama in blank verse, "Gudrun," by Albrecht Rodenbach (a young writer who died two years ago), is the most noted poetical publication of 1882. Novels and tales of various degrees of merit have also appeared.

DENMARK.—Though much interest is taken in the older literature of the country, there is no falling off in work by living writers. Schaudorph's "Poems" and "Novelettes" are noteworthy as indicative of the progress of enlarged and liberal ideas in literature; and Gjellerup's "Pupil of the Germans" goes still further in setting forth the advance of "free thought" and democratic doctrines among the young. Jacobsen's "Romances and Tales" are highly spoken of, and H. Drachmann is noted as the foremost living poet and dramatist of Denmark. His productions are received with enthusiasm. O. W. Smith's "History of Russian Literature, from the Time of Peter the Great," is a work of more than usual merit. Danish historians have been as active as ever. Madvig (so well known in America by his profound work on Latin philology) has published the second volume of his "Constitution and Administration of the Roman State," a very valuable addition to works on this subject. Other works which may be named are: "The Political History, 1635-'45," by Fredericia; Erslev's "Queen Margaret and the Calmar Union"; "Unpublished Documents of Danish History"; Nielsen's "History of Copenhagen"; Lund's "History of Denmark and Norway at the Close of the Sixteenth Century"; and Bache's "History of the North." Brandes's biography of "Ferdinand Lassalle" is highly commended, as also are Brun's "Life of Bishop Gruntvig," and Colin's elaborate narrative of Hans C. Andersen as a poet and a man. Philology has not been neglected. Kalhar's "Dictionary of the Old Danish Language (1300-1700)" is specially to be noted, and Madvig's new edition of Livy's works. Something, not much, has been done in philosophy and physical science. Outlines of psychology, a treatise on Jacob Boehme, a volume on the yellow fever, etc., may be named here.

FRANCE.—Literature in France, during 1882,

does not present its best appearance. Between political excitement and unrest, and the prevalence of so-called "naturalistic" productions of the school of Zola, genuine literature and scientific pursuits have had a rather hard time. Poetry languishes; history only creeps along; criticism is often weak; science produces almost nothing. Were we to attempt a presentation and analysis of the publications of Zola and his numerous followers, the result would be such as to affright the reader. As an offset may be named Daudet's clean and attractive stories, Halévy's "L'Abbé Constantine," Gréville's "Rose Rozier," and other stories, Theuriet's, Erckmann-Chatrian's, Malot's, Verne's, and La Forest's novels and tales. These have done much toward counteracting the pernicious influence of the "naturalistic" writings.

In poetry, Victor Hugo has produced the only noteworthy contribution of the year. Octogenarian though he is, yet his "Torquemada" is full of the fire of genius. In grandeur of conception and skill in the management of his subject, as well as in nobly expressed sentiments on questions of ever-living interest, this will rank among the master works of Victor Hugo. A few other volumes of poetry have appeared from the pens of Bruyère, Tournefort, Latille, Hervé, De Biran, Ratisbonne, etc., but they are considered of little moment to national literature.

History furnishes a few works which may be noted. M. Wallon has published the sixth and concluding volume of his "History of the Revolutionary Tribunal." M. Barre-Duparcq's "History of Philip II" is a work of merit, and M. Lebon has treated the subject of England and the French Revolution in a clear, unprejudiced, and scholarly way. Biographies and memoirs form a branch of literature in which French writers excel. Quite a large number of books of this kind have appeared, such as "Letters of B. Constant to Madame Récamier," D'Haussonville's "Salon de Madame Necker," Vatel's "Madame du Barry," M. Camp's "Souvenirs Littéraires," E. Daudet's life of his brother, A. Daudet, D'Ideville's "Maréchal Bugeaud," the "Confessions of St. Beuve," which last are pronounced to be scandalous, and issued in violation of a distinct pledge to keep them secret. Essays and criticisms by Scherer, St. Victor, Brunetière, Montégut, Stopfer, Lafou, etc., evidence the existence of life and spirit in this branch of literature. Note here also M. Houssaye's "L'Art Français depuis dix Ans," a series of *salon* articles. Some volumes relative to contemporary politics have been published, as Louis Blanc's "Discours Politique," F. Maurice's "View of the Foreign Policy of the French Republic," and Bertrand's "Manual of Administration of Affairs."

Philosophy and science present little of interest. Bouillier's "La Vraie Conscience" defends idealistic psychology against attacks of physiologists; Janry's "Breviaire de l'Histoire du



Materialisme"; Liard's manual of the philosophy of Descartes; and "Revue Scientifique," edited by P. Bert, are worthy of mention. Gubernatis's "Mythologie des Plantes" is interesting and valuable; as is also Marmier's "Légendes des Plantes et des Oiseaux," besides being instructive for general readers.

GERMANY.—Imaginative literature, or works of fiction, have declined still further during this year, and the complaint is largely made that "realism" is invading and injuring all departments of education and literary culture. The effect on poetry and poetic production has been very marked; only a few volumes, and these of no great moment, having appeared. E. von Wildenbruch has enriched dramatic literature with three new works, "The Mennonites," "Fathers and Sons," and "Harald," which are highly praised for superior skill in construction, and noble and effective sentiment, etc. Wagner's "Parsifal" is a musical drama of the middle ages type. It is regarded by the writer's adherents as announcing a new epoch of salvation and religion, destined to take the place of a worn-out Christianity. Other plays of the year are hardly worth mentioning. P. Heyse, the Goethe of German story-tellers, has collected his Provençal tales under the title "Troubadour Novellen," and published a new gem of a story, "Das Glück von Rothenburg." Steub, Keller, Von Saar, Fontane, and Puttitz have also sent forth collections of stories, more or less meritorious. Ebers, the author of "Uarda" (which was a great success), has tried his hand at a romance relating to scenes and events on the Rhine, and Spielhagen has published "Angela," the scene of which is laid on the shores of the Rhine. The critics speak severely of these books, as inferior in ability, skill, etc. Historical and social novels are quite numerous and successful. F. Gregorovius, in his "Athenais" (i. e., the Empress Eudocia), has furnished admirable vindication of that noble lady against certain vile slanders upon her reputation.

In history, the venerable L. von Ranke's "Weltgeschichte" makes steady progress, the second volume having been published on his eighty-sixth birthday. E. Schebech has endeavored to clear the famous Wallenstein from the charge of being a traitor, and it is said with some fair success. Gindely's extensive "History of the Thirty Years' War" has reached its fourth volume, and Stacke's "Deutsche Geschichte" is completed, and also highly esteemed. Monographs in history are numerous, as Dümichen's "History of Ancient Egypt," Justi's "History of Ancient Persia," Stade's "History of Israel," Kugler's "History of the Crusades," Stern's "History of the English Revolution," Philippon's "Age of Louis XIV.," Hassel's "History of Prussian Policy from 1807-'75," etc. The "Historische Taschenbuch," founded by Von Raumer, fifty years ago, is continued with spirit and success. H. Breslau has in it an interesting paper on the famous "Casket Letters"

of Mary Queen of Scots. He considers the more important letters to be forgeries. W. Scherer's "History of German Literature" has reached its sixth part, which brings the history down to Lessing's time; and K. Goedeke's "Introduction to the History of German Poetry" has been finished with the seventh part of the third volume. The Lessing centenary has called forth a deluge of new publications and republications, such as the biographies of Lessing by Danzel and Guhrauer, and K. Fischer's Lessing Lectures. Goethe's and Schiller's works have also occupied much attention of German *savants*, and numerous publications are the result, such as Vischer's "Old and New," comments on Goethe's "Faust," explanations of "Wahrheit und Dichtung," the poet's "Letters," and J. Braun's "Goethe und Schiller im Urtheile ihrer Zeitgenossen." Books of travel have been quite abundant, and on the whole good, as Rodenberg's "Belgium and the Belgians," Bodenstedt's "From the Atlantic to the Pacific," Knortz's "Pictures of Transatlantic Society," Gregorovius's "Corfu," Kaden's "Sketches and Pictures of Italy," etc.

German philosophy is striving to hold its own and make advances. Lotze's death is regarded as a great loss in this department, and several important works of his are left unfinished. Caspari, a pupil of Lotze's, has published a capital historical and critical monograph, "Hermann Lotze," and other pupils have been editing notes and lectures on ethics and the history of philosophy. Von Hartmann has added to his works "The Religious Conscience of Mankind in the Sequence of its Evolution," containing a history of religions from the earliest forms to what the writer considers the future after Christianity is dissolved and gone forever. F. Schulze attempts to furnish a methodical "Philosophy of the Natural Sciences," there being an evident necessity among men of science for some consistent philosophy to meet the wants of their position and principles. The unsolved and, so far as can be seen yet, the insoluble, problems of mind and matter surround men on all sides.

The present year witnesses the publication of the 2,000th volume of the Tauchnitz Library, and the forming an association of German authors in favor of spelling reform. The Government also has given permission to publish the confidential correspondence of Bismarck and Manteuffel, 1851-'54.

GREECE.—There has been about the usual activity in literature, but nothing of special moment has resulted. Some respectable poetry, two or three plays, a few tales or novels, and some creditable work in historical research, are evidences of a fair share of life and interest in literature. An interesting volume has appeared on "Public Law of Greece under Turkish Rule"; also, a small book on the "Taxation of Crete during the First Years of Turkish Domination." Considerable good work has been done in philology, archæology, topography, church



history, etc., for the description of which our present limits do not furnish space.

HOLLAND.—As regards Dutch literature there is not much more to be said than was supplied by Greece in 1882. Novels appear to have been numerous as well as lively, some of the very best having been written by women. Hoffdyk's "History of the Dutch" is highly commended by competent judges, as are also Pierson's "Philosophical Investigations, i. e., Critical Prolegomena of Æsthetics." Fruin's "Contributions to Dutch History and Antiquities" is a work of much merit. Besides these there are other valuable contributions to history by Dutch scholars. The Leyden school in theology is as busy as ever in its advanced rationalism, but with no special progress. Kern's "History of Buddhism in India," Volume I, is a work of real value, and so recognized by critics.

ITALY.—Some efforts of authors and publishers to popularize science and spread literary culture in Italy do not seem to meet with much success. Various manuals have been issued and new periodicals started, but the mass of the people are hardly educated enough to appreciate these at their true value. Creditable additions have been made to literary biographies, as Cantù's "Alessandro Manzoni," Favaro's monograph on "Galileo and the University of Padua," Carducci's "Letters of Guerrazzi," etc. Novelists are said to be on the increase, both male and female: of the former are G. Rovetta, author of "Mater Dolorosa," Ciampoli's "Tales of the Abruzzi," Castelnovo's "Sorrisi e Lagrime," Barille's "Il Ritratto del Diavolo," etc. Of female writers of fiction Matilde Serao, in her "Leggende Napolitane," takes high rank, as do also Cesira Siciliani and "Emma" (*nom de plume*). History and philology hold their place as in past years. The third volume of Villari's "Machiavelli" has appeared; also, the "Letters of Cavour," documentary "History of the Reformation," "History of the Italian Kingdoms established by Napoleon," critical study on the "Life and Times of Dante," etc. In poetry, Carducci's "Nuove Odi Barbare" is much praised; G. D'Annunzio sends forth "Canto Nuovo," and G. Manzoni is highly commended for his volume, "Poesie." Carcano's translation of Shakespeare, in twelve volumes, has been completed.

NORWAY.—Political topics occupy a large share of the attention of people in Norway, and literature proper suffers in consequence. Ibsen's new drama, "A National Enemy," is highly approved, and gives more satisfaction than his last year's "Ghosts, or Apparitions." Jonas Lie maintains his popularity in his latest sailor-story, "Go ahead." A. Kielland advances in public favor in his "Skipper Worde," and other tales; and K. Janson sends forth an excellent historical romance, "Our Grandparents." Several reprints of older authors, some works on natural history, an edition of the mathematical works of N. H. Abel, under the

care of S. Lie, the great mathematician of the day, are worthy of note.

POLAND.—Brief notice is all that Poland requires this year. Considerable discussion of early Polish history, and the publication of a number of books on the subject, are to be noted. Korzon's "Internal History of Poland in the days of Stanislaus Poniatowski" (the last king) is a very creditable production, and the Academy of Sciences at Cracow has published several volumes of documents and valuable historical material. Kraszewski is the chief writer of historical romances and stories. Something, not much, has been done in lyric and narrative poetry, and in the drama. A "History of Universal Literature, with Illustrations," has been begun, and promises well as to the subsequent volumes.

RUSSIA.—In this vast empire, which is in so unsettled and unsatisfactory a state, the censorship of the press bears heavily on literature, and consequently the year has in its record little that is remarkable or important. Tourguenief, Tolstoi, Boborykin, Vallnief, and some others, have contributed novels and stories, and Stehedrin, in his "Letters to my Aunt," has produced a capital satire on the servility, hypocrisy, and the like, in Russian society. In native poetry little has been accomplished, while on the other hand numerous translations of German and English poems have appeared. Several volumes of merit on modern Russian literature have taken the form of biography, such as biographies of Lermontoff, of Pushkin, of Schevtchenko, etc. In history, the Historical Society contributes a number of volumes of documents and material. Kobeko's "Cesarevitch Paul Petrovitch" (Paul I), the strange and wild despot, Troussévitch's "History of the Diplomatic and Commercial Relations of Russia with China," Drygalshi's "Russian Army in War and Peace," and Volume XI of the late Metropolitan Makari's "History of the Russian Church," are deserving of mention here. As is natural, social, political, religious, and national questions excite much interest, and accordingly (as far as the censorship rules permitted) several clever books have been published on these topics, such as Woronzoff's "Fate of Capital in Russia," Youzoff's "Sociological Studies," Tchitcherine's "Property and the State," Daneffski's "Systems of Political Equilibrium and Legitimation, and the Origin of Nationality," Buslaiev's "Development of Religious Beliefs in Russia," etc. A number of good books of travel have also appeared.

SPAIN.—There has been little activity in letters and science in Spain this year. A few works on historical topics, publications of the several academies, a goodly number of novels and tales, some efforts in poetry and the drama, with books on social, statistical, and economical questions, are about all that the literary record can show. Translations from standard English and American writers have been made, and three different works on "bull-fighting,"



its laws and regulations, and the like, have appeared.

SWEDEN.—In general development and progress Sweden holds her own in 1882. The past year has been unusually active in production of historical and descriptive works of merit; as, "Voyage of the Vega," published simultaneously in eleven languages; "Illustrated History of Sweden," in six volumes (each by a separate author); two volumes describing the Swedish people in their home-life, their culture and customs; a National Cyclopædia, in six volumes; a work on Swedish medals and statuettes; the third volume of the "Collection of Swedish Laws," etc. The Finnish poet and novelist, Topelius, continues to be as popular as ever. His well-known "Surgeon's Stories" are in course of publication in a new edition, six volumes, and in several languages.

LONGFELLOW, HENRY WADSWORTH, was born in Portland, Me., February 27, 1807. His father, the Hon. Stephen Longfellow, was a distinguished member of the Maine bar, and also a member of Congress. On his mother's side he was descended from John Alden, one of the Mayflower Puritans, and one whom he has so pleasantly embalmed in his poem, "Miles Standish's Courtship." Of his early years there is only scant record, hardly more than that he was a quiet, gentle boy, who went to school with other boys at the Portland Academy, where Mr. Cushman was head-master. Here he made rapid progress, and, in 1821 (being only fourteen years old), he entered Bowdoin College. In his class were several youths who became afterward well known to the public, such as Nathaniel Hawthorne, G. B. Cheever, J. S. C. Abbott, J. W. Bradley, etc. Longfellow was graduated in 1825, second in his class, and so highly were his talents and acquirements valued and esteemed that, six months after his graduation, when only nineteen, he was appointed Professor of Modern Languages and Literature in his Alma Mater, a chair of which he was the first occupant. With rare good sense, while accepting the appointment, he felt it necessary to fit himself more exactly and fully for his post by travel and study abroad. Accordingly, he spent three and a half years in Europe, in studying French, German, and Italian; and the college wisely waited for his return.

Mr. Longfellow entered upon his duties at Bowdoin College in 1829, and became a very popular professor, noted for his genial, kindly spirit, and for the life and animation he infused into his department. He engaged to some extent in literary pursuits, in prose as well as poetry, and thenceforward devoted himself largely to that noble and honorable career of authorship which ended only with his life.

In 1835 Professor Longfellow was invited to fill the chair of Modern Languages and Literature in Harvard College, from which the eminent historian and scholar, George Ticknor, had just retired. Previously to entering upon

its duties, he resolved to spend another year in Europe in further study and research. While in Rotterdam he met with his first great trouble in life, viz., the death of his wife, to whom he had pledged his faith and love in 1831. Although Longfellow married again, in 1843, this severe domestic affliction probably had its effect in deepening the religious cast of his thoughts, and leading him to brood over topics which later formed the staple of his most touching and enduring verses. On his return home he gave to the public "Outre-Mer," and, two years afterward, "Hyperion," both of them of the nature of prose-poems, and much prized for their simple beauty of style and purity of sentiment.

It was with true poetic instinct that Longfellow, on coming to Harvard to reside, in 1836, secured for his future home that old-fashioned square house, with a broad piazza looking out upon its garden, and its front windows commanding a view of the quiet Charles River, situated a little back from the elm-shaded avenue which leads to Mount Auburn. This was the "Craigie Mansion," occupied at the time by a widow lady of the name of Craigie, who admitted the youthful professor within her walls. On her death, some seven years later, the poet purchased the property, and continued to reside there with his family until his own summons came to leave this world, and pass away to his final account. The house was already famous as being Washington's headquarters after the battle of Bunker Hill. It has, ever since Longfellow's occupancy, been famous in a different sense, as a place of pilgrimage for devout admirers of the genial, much-loved poet.

From this date (1836) onward, for nearly twenty years, Longfellow not only gave careful attention to the duties of his professorship, but also engaged in writing for reviews and magazines, as well as composing and publishing several of his best-known poems, as "Voices of the Night," "Ballads," "The Spanish Student," "The Belfry of Bruges," "Evangeline," "The Golden Legend." He also published "Kavanagh," a New England tale, and edited "The Poets and Poetry of Europe," with biographical notes and translations. The remaining incidents of the poet's life and career are few and easily stated. He resigned his chair in Harvard in 1854, and, in the retirement of his charming home, prepared his later poems and contributions to American literature. He made a third visit to Europe in 1842, and a last visit in 1869, when the university honored itself by conferring upon him the degree of D. C. L. His wife met with a tragic end in 1861. She was sealing a letter in her own room, when her light summer dress caught fire from the lighted taper, and she was burned so severely that she died soon after in great agony. Two sons and two daughters (unmarried) were the inmates of the poet's residence, and survive their honored father.



Longfellow died when he had reached the ripe old age of seventy-five, March 24, 1882. His funeral, attended by numbers of the most distinguished of his countrymen, was simple and without any display, and his mortal remains were placed in the family vault at Mount Auburn. Public services were held in the chapel of Harvard College, when words of mingled grief, resignation, and eulogy were uttered by those who knew and appreciated his worth. It may be mentioned here that steps have been taken in England to erect a suitable memorial of Longfellow in Westminster Abbey—Tennyson, as every way fitting, taking an active part in the proposed honoring of our American poet.

It is perhaps too soon as yet to attempt to fix his precise place and rank among American poets. If he be not the very first, he is certainly in the front rank of modern masters of song. He possessed the true poetic genius and insight; and though he is not the singer of violent, fierce passion, or of the profounder depths of tragedy—that is, not a Homer, or a Dante, or a Milton, or a Shakespeare—he is still a master in all those emotions and passions which stir the hearts of mankind in general. He is one whom myriads of readers learn to love as well as admire, and who continue steadfast in their love all their life long. He is, in the best sense of the words, the people's poet, and Longfellow himself coveted no higher fame than this. There is one feature in his poems to be noted, and that is his perfect skill as an artist. He always made most careful preparation before beginning to write any of his longer poems, and he spared no toil to secure the most complete accuracy, in every, even the minutest, particular. His large and varied reading, his thorough culture, his keen appreciation of the beauty and power of art, his own genial, loving, kindly nature, his true gentlemanly instincts and perceptions, all these not only aided the poet but guided him to a large extent in his work. From first to last, Longfellow was the same; and it is worthy of note that his mental and poetical vigor was vouchsafed to him to the very close of life, as may easily be seen by a perusal of "*Morituri Salutamus*" and "*Ultima Thule*."

The works of Henry W. Longfellow may properly here be enumerated. They are published both separately and in collected forms by Messrs. Houghton, Mifflin & Co., of Boston, in various sizes and at various prices, from the diamond 18mo (poems) to the illustrated 8vo. The best library edition is the one known as the Cambridge edition, the poetical works being in four crown 8vo volumes, the prose works in two volumes. Most of his "*Earlier Poems*," written before he was nineteen, are included in his collected works; the others in the order of time are as follow:

1. *Voices of the Night*, 1839.
2. *Ballads and other Poems*, 1841.
3. *Poems on Slavery*, 1842.

4. *The Spanish Student*, 1843.
5. *The Belfry of Bruges and other Poems*, 1845.
6. *Evangeline. A Tale of Acadie*, 1847.
7. *The Seaside and the Fireside*, 1847.
8. *The Song of Hiawatha*, 1855.
9. *The Courtship of Miles Standish*, 1858.
10. *Birds of Passage, Flights First to Fifth*.
11. *Tales of a Wayside Inn*, 1863.
12. *Flower-de-Luce, and other Poems*, 1866.
13. *CHRISTUS: A Mystery. In Three Parts. I. The Divine Tragedy. II. The Golden Legend. III. The New England Tragedies*, 1872, '51, '68.
14. *Aftermath*, 1874.
15. *The Hanging of the Crane*, 1874.
16. *Morituri Salutamus*, 1875.
17. *The Masque of Pandora*, 1876.
18. *Keramos, and other Poems*, 1878.
19. *Ultima Thule*, 1880.
20. *In the Harbor, Part II of Ultima Thule*, 1881.
21. *Translations, at various periods, 1833-1880*.
22. *The Waif. A Collection of Poems. Edited by H. W. Longfellow*, 1846.
23. *The Estray. A Collection of Poems. Edited by the same*, 1846.
24. *The Divina Commedia of Dante. Translated from the Italian, 3 vols., 1867-'70*.
25. *Poems of Places, 31 vols., 18mo. Edited by the same*, 1872.

- PROSE WORKS.—1. *Outre-Mer. A Pilgrimage beyond the Sea*, 1835.
2. *Hyperion. A Romance*, 1839.
  3. *Driftwood. From the French*, 1833.
  4. *Kavanagh. A Tale*, 1849.

**LOOM, POSITIVE-MOTION.** A simple contrivance has been introduced by James Lyall, an American inventor, by which a positive and even motion is given to the shuttle in weaving. Many attempts have been made to remedy the defects of the flying shuttle, and bring the shuttle-movement to the same degree of mechanical efficiency as the other parts of the modern loom. Compressed air, magnets, clutch-sticks to pull the shuttle through, and revolving rollers to catch it and expel it from a shuttle-box, have been tried, to give it a positive and controllable motion. The solution of this problem may take rank with the flying shuttle, invented by John Kay in 1835, which it would supplant, with Dr. Arkwright's power-loom, and with Jacquard's process for weaving designs, as a great improvement in the weaving art. The inconveniences of the intermittent action of the shuttle, driven, as heretofore, by picking-sticks, are such as to make the loom, with its perfect mechanism in other respects, an uncertain instrument, and cause frequent stoppages of work and destruction of materials. The friction of the shuttle on the warp weakens the threads constantly, and makes the fabric less durable than it would otherwise be. Some of the threads break under the strain. The frequent eccentric behavior of the shuttle is more serious, and causes all degrees of damage, from occasional broken threads and defective selvage, to the destruction of the piece of cloth or breaking of the machine. The leather on the picking-staff becomes irregularly worn, and the shuttle takes a wrong direction, or the blows are too weak, causing it to stop short in its course, or too strong, causing it to recoil from the

opposite pick and bringing about the same result.

The device of Lyall is simply a carriage on which the shuttle is drawn back and forth, with rollers between the carriage and the shuttle, which allow the lower shed of warp to pass between. The carriage is propelled on rollers by a band over a raceway. The friction-rollers on the carriage are placed outside of those on the shuttle, so that the shuttle is held in place and given the motion of the carriage by the purchase derived from the inclosing rollers. The shuttle is held down upon the carriage by a track above, upon which run rollers placed on the top of the shuttle, the upper shed of warp being held against the track so that the rollers can pass over.

**LOUISIANA. STATE OFFICERS.**—Governor, Samuel Douglas McEnery; \* Secretary of State, William A. Strong; Treasurer, E. A. Burke; Auditor, Allen Jumel; Superintendent of Public Education, Edwin H. Fay; Attorney-General, James C. Egan. United States Senators (Forty-seventh Congress), W. P. Kellogg and B. F. Jonas; Members of the Forty-seventh Congress: First District, Randall L. Gibson; Second District, E. John Ellis; Third District, Chester B. Darrall; Fourth District, Newton C. Blanchard; Fifth District, E. W. Robertson; Sixth District, J. Floyd King.

Members of the Forty-eighth Congress elect: Carlton Hunt, William P. Kellogg, E. John Ellis, Newton C. Blanchard, Andrew Herron,† J. Floyd King.

**THE OVERFLOWS.**—The unprecedented flood in the beginning of the year laid waste hundreds of square miles of land, sweeping away cattle and fences, destroying houses or making them uninhabitable, tearing up and washing away railroads, devastating plantations, and reducing several thousand people, white and black, to absolute destitution. Fortunately, the loss of life was inconsiderable. It is estimated that 585,000 acres of land—208,000 of which were in Louisiana—were overflowed. The damage to the sugar districts was not so great as to cotton-lands. The pecuniary loss by the overflow in Louisiana amounted to upward of \$2,000,000. When it occurred there was no money in the State Treasury which could be used for the relief of the sufferers; and had not the Congress of the United States been in session and with laudable promptitude and unanimity made provision for the immediate relief of the distress, thousands must have perished from exposure and starvation, the liberal contributions of the people of New Orleans and other places being quite insufficient to meet the emergency. The United States Government furnished 1,966,000 rations, costing \$218,630, which were distributed among 180,000 of the most necessitous, made

liberal appropriations of money, and also sent a number of tents for the shelter of those who were made houseless. The flood extended over thirteen parishes, to a greater or less extent. Notwithstanding this calamity, the people have cause for thanksgiving in the good state of the public health during the year, owing, it is believed, to the wise and efficient measures adopted and rigidly carried out by the Board of Health. By this system of quarantine not only has the health of Louisiana been protected, but that of the inhabitants of the entire valley of the Mississippi. It is claimed that the absence of yellow fever, caused by the vigilance of the authorities, goes a long way to prove that the disease is imported and not indigenous, and that the city of New Orleans is not the hot-bed of pestilence, from which it is communicated to other places, as many have hitherto supposed.

**FINANCES.**—The unsettled condition of the finances of the State for several years past has seriously impeded her growth and prosperity, causing a universal distrust, which has not merely affected the credit and honor of the Commonwealth, but has also, to a great extent, affected injuriously individual credit, prevented investment of foreign capital, and excluded immigration. The bonded debt of the State, as reported by the State Treasurer and Auditor in May, 1882, consists of:

Seven per cent consols, unstamped.....	\$11,822,900
Four per cent constitutional bonds.....	198,750
Bonds stamped two per cent, three per cent, and four per cent.....	265,200
Total bonded debt.....	\$11,786,850

In 1879 the Constitutional Convention enacted what is known as the "Debt Ordinance," which was subsequently ratified by the people. This ordinance offered to the public creditor who held a 7 per cent bond 2 per cent interest for five years, 3 per cent for fifteen years, and 4 per cent from that time to the maturity of the bonds, giving the bondholders, however, the option of scaling their bonds 25 cents on the dollar, and receiving 4 per cent interest. The creditors declined to accept these terms, as is shown by the fact that only \$186,150 have been funded into 4 per cents, and only \$237,000 have been stamped as accepting the 2 per cent offered. In the mean time, the interest fund has been collected from the taxpayers and amounts to upward of \$1,000,000 lying in the hands of the fiscal agent, and tied up by injunctions issued by the Federal courts. The bondholders have made the following proposition to the Governor:

*To his Excellency Samuel D. McEnery, Governor of the State of Louisiana.*

**RESPECTED SIR:** The undersigned holders of bonds of the State of Louisiana known as consolidated bonds, bearing 7 per cent, who have declined to accept the propositions contained in the debt ordinance, and being deeply interested in the welfare of the State, beg leave most respectfully to suggest to your Excellency, and to request that at the approaching meeting of the General Assembly it may please your Excellency to

\* Elected Lieutenant-Governor; became Governor on the death of Louis A. Wiltz.

† Died at Baton Rouge, November 27th. Vacancy to be filled in February, 1883.



recommend proper and further legislation for the final adjustment of the bonded debt of the State on the following basis, viz.:

1. That provision be made for paying the interest thereon for the first five years since January 1, 1880, at the rate of 2 per cent per annum in lieu of 7 per cent, as therein provided, the payment of which not to prejudice or novate the original constitutional contract of 1874, unless the amendment to the Constitution necessary to effect the proposed reduction of interest be adopted by the people of the State.

2. The State of Louisiana will thereafter agree to pay 4 per cent interest per annum, in lieu of 7 per cent, with ample legislation to secure the prompt and regular payment of said 4 per cent.

At the request of the Governor, the Auditor and the Treasurer, to whom he referred the above proposition, gave an opinion, of which the following is an extract:

If the holders of unstamped 7 per cent consols should avail themselves of the provisions of the debt ordinance and scale their bonds at seventy-five cents, as authorized therein, and the holders of consols stamped for reduced interest should retain their present form of bond, the yearly interest requirements of the State for the existing debt would, for five years, be as follows:

\$11,822,900 consols, less 25 per cent, \$8,492,175, at 4 per cent.....	\$389,637
\$263,200 consols, stamped, 2 per cent.....	5,904
\$198,750 constitutional bonds at 4 per cent.....	7,940

Total yearly interest.....\$352,981

The interest account under the constitutional provisions would require for twenty years, or until the period at which the Constitution provides for the payment of 4 per cent on unscaled bonds:

\$8,492,175 at 4 per cent, twenty years.....	\$6,793,740
\$198,750 at 4 per cent, twenty years.....	158,800
\$263,200 at 2 per cent for five years, 3 per cent for fifteen years.....	145,860

Total interest as per debt ordinance.....\$7,098,400

Under the proposition now submitted by the owners and representatives of bonds, the interest requirements would be as follows, viz.:

\$11,588,100 at 2 per cent for five years, \$231,762 per year.....	\$1,158,810
\$11,588,100 at 4 per cent for fifteen years, \$463,524 per year.....	6,952,860
\$198,750 at 4 per cent for twenty years, \$7,950 per year.....	159,000

Total interest, twenty years.....\$8,270,670

#### SUMMARY.

Bondholders' proposition.....	\$2,270,670
Debt ordinance.....	7,098,400
Difference in twenty years.....	\$1,172,270
Less surplus from interest fund to general expenses for five years.....	566,095
Total difference in interest.....	\$606,175

Or an average difference against the State of \$30,308.75 per year from January 1, 1880, to January 1, 1900, after which time the Constitution provides for the payment of 4 per cent on the face of consolidated bonds stamped for reduced interest.

We unhesitatingly advise the adoption of the proposition as looking to a final settlement of this vexatious question, and as presenting a means of partially relieving the State from existing financial embarrassments. The adoption of an amendment as proposed will place the bonds of the State at par, and all sections of the State will experience the advantage flowing from the values thus added to the resources of our citizens.

In addition to these considerations, this measure of justice will unite the people of our State upon a ques-

tion which must disturb our politics and impede our material advancement as long as it remains unsettled.

We have the honor to be, very respectfully,

ALLEN JUMEL, Auditor.  
E. A. BURKE, Treasurer.

The necessary steps have been taken by the Legislature to give effect to the proposed adjustment of the difficulty, and it is hoped that this, with the passage of a suitable revenue bill, will restore the credit of the State and enable her to repair the damage inflicted by years of reckless extravagance and misrule. The receipts at the Treasury for the year 1882, from all sources, amounted to \$2,353,621.66, derived as follows: General fund, \$803,569.43; school fund, \$205,455.20; interest tax fund, \$819,022.92; levee construction and repair fund, \$5,232.24; general engineer fund, \$141,753.78; interest and redemption of \$5 bonds, \$44,764.68; redemption of school certificates, \$7,487.32; poll-tax fund, \$5,209.72; Charity Hospital fund, \$47,672.47; levee and drainage fund, \$36,034.56; free-school fund, \$13,567.42; district levee fund, \$119,870.34; militia fund, \$150; judicial expense fund, \$102,387.83; agricultural and immigration fund, \$990; balance on hand January 1, 1882, \$453.75. The disbursements for the same period amounted to \$1,617,164.17. The assessment roll of 1881 shows that the real property in the State was assessed at \$130,701,901, and personal property at \$50,758,060, thus making the former pay 72 per cent and the latter only 28 per cent of the total State tax, while it is well known that the value of personal is quite equal to that of real property, and should bear an equal share of the burden of taxation. The taxation is limited by the Constitution to six mills. Very large amounts are due the State for "back taxes," of which it is expected 50 per cent at least will soon be collected and paid into the Treasury. When this is done, and the flagrant inequalities of assessments are fully corrected, the resources of the State will be ample to meet all her just and legal obligations.

The total number of registered voters in the State is 172,005, of whom 158,485 are natives, 13,276 of foreign birth, 85,451 whites, 88,024 colored, 69,006 whites who can write and 16,913 who are illiterate, 11,403 colored who can write and 76,087 who are illiterate.

STATE INSTITUTIONS.—The Louisiana State University and Agricultural and Mechanical College, since the election of Colonel William Preston Johnston, son of the late General Albert Sidney Johnston, as president, has been thoroughly organized and placed upon a new basis. It is now located at Baton Rouge, on a high bluff overlooking the river, commanding an extensive view. The main building, five stories in height, is 270 by 90 feet, with two wings, two stories high, 158 by 60 feet. These contain 79 rooms, embracing mess-hall, library of 17,000 volumes, hospital, chapel, museum, cadets' sleeping-rooms, class-rooms, etc. The

grounds are capacious and tastefully laid out. The faculty consist of ten professors, who instruct in English, mathematics, chemistry, Latin and Greek, the modern languages, mechanics, agriculture, and military tactics. Attached to the institution is a machine-shop where 70 cadets are now learning carpentry, forging, and turning. Under the supervision of President Johnston and the university surgeon, Dr. Dupree, a station for the production of vaccine lymph was instituted and the product was distributed *gratis* within the State. The sales outside of the State paid all the expenses. The government and discipline of the cadets are well administered, and all the institution needs is a liberal appropriation by the State to make its success certain. It has 150 students in attendance, with promise of a large increase. It grants four degrees, namely, Bachelor of Arts, Bachelor of Science, Graduate in Agriculture, and Graduate in Mechanics. The University of Louisiana, situated in the center of the city of New Orleans, on Baronne, Common, and Dryades Streets, is composed of four faculties, viz., one of Law, one of Medicine, one of the Natural Sciences, and one of Letters. The academical department, though of comparatively recent establishment, is advancing rapidly in efficiency and usefulness. The buildings are handsome and commodious, and have been made more capacious by the purchase and addition to them of the building known as the "Mechanics' Institute." During the session 1881-'82 there were in the different departments of the university 494 students—in the academical department (including the High-School) 250; in the medical department, 217; and in the law department, 27. The university is under the control of a board of administrators, of which the Governor of the State, the Chief-Justice of the Supreme Court, and the Mayor of New Orleans, are *ex-officio* members. The other members are appointed by the Governor, with the consent of the Senate. This board, owing to the imperfect preparation of students seeking entrance, has been forced to choose between establishing a high-school in the university, and lowering the standard of scholarship in the academical department. They have wisely chosen the former, and thus far it has been very successful. The State Library, of 26,000 volumes, is arranged in the wing of the university devoted to the law department. The State appropriates \$10,000 annually for the support of the institution. The faculty of the academical department consists of eleven professors and instructors. The university for the education of people of color, which was opened in January, 1881, with a fair prospect for usefulness and a large number of students, was closed in June of that year, and has not been reopened, because the trustees were unwilling to sacrifice the warrants of the State—its only assets—at the ruinous discount at which they could be sold. It is now hoped

that under an improved financial system all these embarrassments will be removed, and adequate provision made for the support of the institutions of the State.

**COMMON SCHOOLS.**—The report of the Superintendent of Public Education gives an encouraging account of the progress of education in the State. The total attendance was close to 70,000 pupils, which is a large increase over former years. Accurate figures can not be given, as several parishes have failed to report. The sum apportioned was \$123,500.

The city of New Orleans has a school system of her own, with a board of directors and superintendent. The total enrollment of pupils for the session of nine months is estimated at about 25,000, of which number about one fifth are colored. The number of schools in the city is fifty-four. One high-school for boys; one high-school for girls; twenty-seven grammar-schools, with eight years of instruction; eight grammar-schools, with a seven-years' course; three primary schools, with a four-years' course; and one special primary, with a Kindergarten system. Of this number thirteen, of mixed grammar and primary grades, are exclusively for colored pupils. The total means for the support of the schools—assuming, as is supposed, that they will be equal in amount to that of the previous year—are \$210,000, of which amount upward of nine tenths are derived from the city appropriations, the remaining tenth from the poll-tax and from the current school fund of the State. For several years the city government has appropriated \$200,000 per annum; but the expenses of the schools have largely exceeded the income, and the Board of Directors are unable to make income and expense balance, by reducing salaries and discharging some of the teachers, because the law requires an unbroken session of nine or ten months, and the payment of all salaries in twelve monthly installments, and forbids the discharge of any teacher once elected, except upon "written charges of degeneracy, neglect of duty, incompetency, or malfeasance, of which he or she shall be found guilty by a majority of the members of the board at a regular meeting." The improvement of the colored pupils in these schools is represented as very marked and encouraging. The separation of the whites and blacks has ceased to create any friction, and is now acquiesced in as the best arrangement for both.

THE STATE ASYLUM FOR THE INSANE, situated at Jackson, La., contained, at the last report, two hundred and fifty-two patients, forty-seven of whom were colored. About 60 per cent are able to work, and are engaged in gardening, in making bricks, and other manual labor. Were it not for this the institution could not be carried on with the means appropriated to it, which are paid in warrants, and have been hitherto sold at a discount of 50 per cent. The death-rate is only 4 per cent per annum. The capacity of the institution is quite



insufficient to accommodate the insane of the State. Those who can not obtain admittance are detained in the country jails. The annual appropriation for the asylum is \$50,000, which, if paid in par funds, would be an ample provision.

**THE CONSTITUTION OF 1879.**—The Governor, in his last message, expresses much discontent with the practical working of the Constitution adopted in 1879. He says: "The instrument is voluminous, and contains many provisions, borrowed from other States, not applicable to our system of laws or to our condition. The appointing power of the Executive is too great, and it is not well distributed. With an immense patronage, he has no power, and his efforts to execute the law result in recommendations and remonstrances. The system of removing officers for delinquencies, incompetency, and corruption, without the power of suspension, is too complicated. The result is, that a judicial contest is equivalent to the prosecuted officer serving out his term, and enjoying the emoluments of his office. The judiciary system is unsatisfactory, and has been the cause of much complaint. The restrictions on the Legislature are unwise, and exclude from its control many subjects which should demand its attention. The limitation on taxation is unfortunate, and the financial system under it is confused and embarrassed. The General Assembly can be liberal in its appropriations, but it is limited in the taxation to meet them. The Constitution declares gambling to be a vice, yet it encourages that vice in its worst forms, not only inciting to breaches of faith and embezzlement in the effort to get rich in the turn of a wheel, but demoralizing society, corrupting politics, and impeding legislation. The Constitution was intended to expedite judicial inquiries, and to cheapen litigation, but it has crowded the dockets of the courts, and increased the costs to such an extent that many are afraid to venture within the halls of justice. The instrument is difficult to interpret, and impracticable in its execution. A new Constitution would be a blessing, and I hope to see the State under an organic law suitable to our wants, and in harmony with our laws."

**THE CITY OF NEW ORLEANS—DEBT, ETC.**—The long-voiced question of the heavy debt of the city of New Orleans has been, it is hoped, finally and satisfactorily adjusted by the Legislature, and the grievous load of judicial taxation which, for more than two years, has crushed the tax-payers of the city, averted. Acts have been passed authorizing the municipal authorities to levy annually, commencing in 1883, a tax not to exceed five mills, in addition to the ten-mill tax authorized by the Constitution of 1879, and the tax of five mills required by the premium bond act, to pay the annual interest on all outstanding bonds of the city, other than premium bonds, the surplus, if any, to be used as a sinking

fund; and authorizing the renewal, extending the payment for forty years, of all outstanding bonds, except premium bonds, providing for the payment of interest thereon at six per cent, and reserving to the city the right to call in and pay the bonds at par after the year 1895. Provision is also made for the issue of certificates of indebtedness dated January 1, 1883, payable with six per cent interest per annum, in ten years or sooner at the option of the city, for the sum of all matured coupons outstanding on January 1, 1883. It is further provided that all legal proceedings instituted to delay or obstruct the operation of these acts shall be tried summarily and by preference over all other causes, and determined immediately, whether the courts be in vacation or not. The creditors have thus the option to accept the terms of either of these acts. This settlement faithfully carried out will benefit every material interest of the city, enhance the value of property, and restore public confidence in the good faith of the people. With the cheap transportation of her great river and her now completed railway communication with the Pacific coast, New Orleans will command the bulk of the trade of the valley of the Mississippi, and regain the Mexican, Central and South American trade. There is now a through railroad connection between New Orleans and San Francisco. The New Orleans Pacific Railroad extends in a northwestward direction from New Orleans to Shreveport on Red River, a distance of 325 miles, through the richest part of Louisiana. At Shreveport, junction is made with the main line of the Texas Pacific Railroad. The first ninety miles of the line out of New Orleans follow the general course of the Mississippi River, running through the largest sugar and rice plantations in the State. At Bruslé, a branch eight miles long connects the road with Baton Rouge, the capital of the State. From Bruslé the road turns more westward to the Atchafalaya River, which it reaches at Churchville, 130 miles from New Orleans; thence in a northwesterly direction, striking the rich valley of the Red River—the great cotton-producing section—it reaches Alexandria, 200 miles from New Orleans. From Alexandria it follows the course of the river, passing near Natchitoches, traversing the largest timber region of the State, and reaches Shreveport by way of Mansfield. Along the whole line from New Orleans to Alexandria, immense cypress thickets are easily accessible, and thence to Shreveport it passes through forests of the finest "long-leaf" pine. During the summer shipments of wheat *via* the Southern Pacific Railroad reached New Orleans, as an experiment to prove whether the overland shipments can be made as cheaply as by the long ocean-voyage from San Francisco, and whether, although there may be theoretically a limit at which actual cost of transportation may check railroad business, practically, minimum freights may not be more remunerative

than empty cars, sent to carry back the sugar, molasses, and rice of the Southwest.

The annual settlement of the United States Mint at New Orleans for the fiscal year ending June 30, 1882, showed that the varied and delicate operations of that establishment had been skillfully conducted. The bullion operated on amounted to nearly \$18,000,000, with a wastage of less than \$3,000, being far within the limit allowed by law. The coin and bullion in the immediate possession of the Superintendent on the day of settlement amounted to

\$5,047,585. The coinage for the fiscal year was, gold, \$101,700, and standard silver dollars, \$4,958,000. The coinage at the mint is far less than the demand for distribution, so that frequent transfers of silver by the Assistant Treasurer have to be made to meet the demand when the crops begin to move and the active business season commences.

The following is a statement of receipts and disbursements by the Assistant Treasurer of the United States at New Orleans, during the fiscal years ending June 30, 1880, 1881, and 1882:

#### RECEIPTS.

ACCOUNT.	1880.	1881.	1882.
Customs.....	\$2,382,996 21	\$3,127,801 74	\$3,562,551 95
Internal revenue.....	1,182,576 40	927,021 96	1,065,186 97
Sales of lands.....	17,169 86	45,792 56	752,766 96
Post-Office department.....	786,751 48	629,288 10	1,001,788 24
Transfers.....	3,215,752 42	13,084,692 30	13,319,896 44
Disbursing officers.....	3,762,023 54	5,687,166 83	5,992,568 91
Miscellaneous.....	1,279,350 79	165,681 16	862,607 41
Totals.....	\$12,576,620 70	\$23,617,489 65	\$26,556,511 88

#### DISBURSEMENTS.

ACCOUNT.	1880.	1881.	1882.
Treasury drafts.....	\$2,765,056 72	\$3,199,070 87	\$3,215,867 22
Post-Office warrants.....	705,227 69	681,623 94	866,472 69
Disbursing officers' checks.....	4,716,687 65	4,853,161 17	6,298,436 00
Transfers.....	5,414,700 00	14,117,864 59	13,494,042 57
Miscellaneous.....	7,689 00	7,272 00	323,569 06
Totals.....	\$13,609,311 06	\$22,388,992 07	\$24,197,877 54

The domestic exports from the port of New Orleans to foreign countries, during the fiscal year 1881-'82, amounted to \$68,190,431, a falling off of \$35,196,019 as compared with the preceding year. The imports of foreign products and manufactures at New Orleans for the same period amounted to \$11,993,852, a falling off of \$419,418 as compared with the year before. The ocean tonnage shows a decline corresponding to the reduced amount of the exports and imports. This year 897 vessels, with a tonnage of 998,079, entered, and 953 vessels, tonnage 1,038,859, cleared; and last year 1,255 vessels, tonnage 1,422,726, entered, and 1,257 vessels, tonnage 1,402,496, cleared.

The commercial year, which closed August 31st, was far from prosperous. There was a large decrease in the leading lines of trade. The season was unfavorable for agriculture, especially in the staple crops—cotton and sugar. Good prices, however, were maintained, and, despite the many drawbacks, the number of commercial failures was not large. Local finances improved greatly. State and city securities appreciated. The banks did a profitable business and are in a sound condition, and more money has been invested in improvements than in any year since the close of the war. The tendency to invest in manufactures is marked. The completion of the two through trunk lines west of the Mississippi, and the active prosecution of the work on two lines east of the river, indicate confi-

dence in the future prosperity of the State. The Southern Pacific is doing a large business, and the New Orleans Pacific is bringing large additions to trade with Northern Texas.

THE TULANE DONATIONS.—During the winter of last year it was announced that Mr. Paul Tulane, of Princeton N. J., but for many years a citizen of New Orleans, had conveyed a large estate to trustees to be used for the education of the white youth of the city of New Orleans. There was some delay in perfecting the arrangements, but now the deeds have been recorded, and the charter incorporating the trustees duly issued. The gift embraces all the real estate owned by Mr. Tulane in the city of New Orleans, worth at assessors' valuation \$288,700, yielding an annual income of \$38,000. In his letter to the trustees he declares the purpose of the donation to be—

For the promotion and encouragement of intellectual, moral, and industrial education among the white young persons in the city of New Orleans, State of Louisiana, and for the advancement of learning and letters, the arts and sciences therein, my intention being that the benefits shall be applied and expended in the city of New Orleans.

By the term education, I mean to foster such a course of intellectual development as shall be useful and of solid worth, and not be merely ornamental or superficial. I mean you should adopt the course which, as wise and good men, would commend itself to you, as being conducive to immediate practical benefit, rather than theoretical possible advantage. I wish you to establish or foster institutions of a higher grade of learning, where the young persons to be benefited shall, upon due examination, be found competent and qualified for admission, both by age and pre-



vious training, to receive the benefits of a more advanced degree of educational culture.

Intellectual advancement should be unfettered by sectarianism, but the profound reverence I entertain for the holy Scriptures leads me to express here the hope that the educational development intended by this gift should never antagonize, but be in harmony with, the great fundamental principles of Christian truth contained in them.

As to the details of the administration of the property and the application of its revenues, he gives *carte blanche* to the trustees. He makes the following suggestions:

The plan and details of any organization, corporate or otherwise, must of necessity be left to your own judgment, but I desire to communicate to you my wishes in such manner as to enable you more fully to enter into the motives which impel me, thereby enabling you completely to enter into my thoughts and purposes. Of course, whatever I may determine to donate to you, should you conclude to organize, will be (while leaving you the absolute owners of the property), with the object of enabling you, in your discretion, to use the revenues for the purposes already by me mentioned. I suggest and recommend:

1. That in your organization, whatever form it may assume, that my friend General Randall Lee Gibson be your chairman, or President, and that Judge Charles E. Fenner and James McConnell, Esq., be vice-presidents, or vice-chairmen.

2. That you provide for the filling of any vacancies in your number, by death, resignation, or otherwise, by election.

3. That while my desire is that you shall continue my purpose for more than fifty years, nevertheless, I would consider it no violation of these wishes should you, when organized, determine after fifty years no longer to perform the duties incident to the ownership of this property, which I may donate, and the income of which I have expressed the desire that you administer as aforesaid: in that event, I suggest that you distribute the property, or the proceeds from the sale thereof, among such educational or literary institutions, or for such educational purposes as you may determine, in the city of New Orleans, as are contemplated in this donation.

4. In order that there shall be no doubt in regard to my intentions, I will say it is not my desire to bind you to distribute the incomes or benefits of the fund or property to any particular school, college, or institution of learning, or to create any claim on the part of any school, college, or institution of learning to any distributive share, nor do I design to subject you collectively or individually to any responsibility to those intended to be benefited, or to any individual responsibility of any sort, for the management of the property and fund which may be by me donated.

Steps are being taken by General Gibson and his associates, as rapidly as the nature of the case will permit, to perfect the organization of the contemplated institution of learning.

SUGAR is pre-eminently the staple product of Louisiana. No other State, except Texas, cultivates the cane to any extent; and as yet, in Texas, the production is far behind that of Louisiana. Notwithstanding the damage done by the inundation, the total crop of this year is estimated to be 227,000 hogsheads, worth \$25,000,000; molasses, 14,000,000 gallons, worth \$5,000,000. The number of sugar-houses in operation is upward of 1,200. There are in New Orleans five sugar-refining establishments, in which the low grades of Louisi-

ana sugars and a large quantity of foreign products are worked into bright sugars and sirups. The productive capacity of these refineries is 360,000 pounds of sugar daily, besides sirups and soft sugars. The adulteration of sugar, with glucose and other deleterious substances, had become so common that the interference of the Legislature was invoked, and an act passed this year making it a misdemeanor, punishable with heavy fine and imprisonment, "to sell, ship, or offer for sale, by sample, hogsh-head, or barrel, any sugar or molasses, adulterated with glucose or other foreign substance, without branding or stamping it as such in clear and legible letters."

The rice-crop of this year has been very abundant, the acreage larger and the grain heavier and better filled than last year.

JUTE.—The cultivation of jute as one of the staple crops of Louisiana, and, indeed, of all the Gulf States, is destined in the not distant future to be a very important and extensive industry, especially on the lowland plantations and in the extensive sea-marshes. It has been long known that jute can be successfully grown to any extent in the Gulf States; but the absence of machinery to separate the fiber from the wood, and thus prepare it for market, at a cost to allow competition with that imported from India, has prevented its production on any extended scale. It has now been demonstrated by Mr. C. Menelas, of New Orleans, that Mr. Albee Smith, of St. Louis, has invented a machine by which the difficulty may be overcome, and jute prepared for market at a cost of from two to two and a half cents per pound, the ruling price of imported jute being four and a half cents. It is estimated that on the rich bottom-lands from one to two tons of fiber per acre can be raised. The United States are now paying \$10,000,000 annually for imported jute and jute goods. The demand is increasing every year, and if it can be proved, as is stated, that this material can be supplied at home at half the cost of the imported article, it is not unreasonable to expect that it will soon become a staple product of the South. The inventor of the machine states that, with a small mill, with one man to feed and a boy to remove refuse matter, 15,000 pounds of green jute can be produced in one day. After the fiber has been separated, it is placed in vats for rotting, and in from ten to fifteen days it is ready for market. It is said that jute, planted in belts in and around cotton-fields, is a perfect protection against all caterpillars and other insect-enemies of cotton. It certainly has no such enemies of its own, and it is not injuriously affected by drought.

Careful soundings, taken by order of the Mississippi River Investigating Committee, both between the Eads jetties and outside the jetties seaward, indicate that the channel is throughout of the depth and width required by the Government. The advocates of what is called the "outlet-system" have denied this, and are



still quite active in opposing the work of river improvement now in progress, for which Congress made so liberal appropriations at its last session.

The Burnside will case, in which it was sought to set aside the order of court appointing Oliver Beirne, of West Virginia, testamentary executor and residuary legatee of the late John Burnside, the millionaire planter of Louisiana, has been decided in favor of Beirne.

The New Orleans Cotton Exchange have erected a fine building at the corner of Gravier and Carondelet Streets. The corner-stone was laid by Governor McEnery on January 23, 1882.

The two hundredth anniversary of the discovery of the mouths of the Mississippi River, by La Salle (April 10, 1682), was celebrated with appropriate ceremonies.

The following is the estimated amount and value of the products of the State for 1882:

Sugar, 227,000 hogsheads .....	\$25,000,000
Molasses, 14,000,000 gallons .....	5,000,000
Cotton, 480,000 bales .....	20,000,000
Rice, 61,100,000 pounds .....	3,250,000
Cotton-seed products .....	2,000,000
Grain .....	10,000,000
Miscellaneous .....	2,000,000

Total value.....\$67,250,000

**LUNG-PLAGUE OF CATTLE.** Contagious pleuro-pneumonia, or lung-plague of cattle, continues to be a source of solicitude, and has been made the subject of extended official investigation. It has been shown to be thus far confined in the United States to a narrow section along the middle Atlantic coast, and, as it spreads only by infection, it is deemed entirely practicable to stamp it out of existence and prevent its reappearance if the proper measures are taken before it has been carried into the South and West.

The origin of this distemper, like that of all contagious diseases, is concealed in remote obscurity. There are indications of its existence in ancient times, and authentic records of its prevalence in Europe nearly two hundred years ago. It has a permanent existence in the unfenced mountain regions of Central and Eastern Europe, and was first carried thence into domestic herds by the commissary operations of great wars. The conflicts attending and following the French Revolution first brought it into the channels of commerce so as to attract attention in consequence of the active trade and interchange of cattle which they stimulated. There were periodical ravages in Northern France and other parts of Central Europe from 1820 to 1840. It made its first appearance in Holland about 1830. Ten years later there was considerable importation of Dutch cattle into Great Britain and Ireland for the purpose of improving stock, and this infection made its appearance at Dublin in 1841, and in the vicinity of London in 1842. Since that time there has been more or less trouble with it wherever there was a market for imported stock, while those centers of the cattle-trade which rely on domestic breeds and sell the

native product instead of buying foreign, have been free from it. In England, vigorous repressive measures have been employed to destroy the infection, but it has had a continuous prevalence in Ireland in consequence of the constant interchange of cattle that is going on there. The plague was carried into Northern Europe—Denmark, Sweden, and Norway—about 1847-'48, and was taken to South Africa from Holland in 1854, and to Australia from England in 1858. In these southern countries its ravages have been especially severe, and it has been found very difficult to deal with it, as a warm climate is favorable to its spread.

The lung-plague was first brought into the United States by means of a single cow bought from the captain of an English vessel by a milkman of Brooklyn, N. Y., in 1848, and the disease, as it now exists in this country, is traceable to that one case. An entirely separate infection was introduced into Massachusetts by an importation of Dutch cattle in 1859, but was dealt with so vigorously that in six years it was utterly exterminated. The infected cattle first introduced consisted of four cows imported for a stock-farm, and, owing to insufficient understanding of the case and inadequate precautions, it was permitted to spread, through the sale of calves. It was carried into several localities in Massachusetts and sent into New Hampshire. The introduction of diseased cattle into the latter State was stopped by proclamation and a vigorous slaughtering of herds in which the plague appeared, and, in the spring of 1860, the Legislature of Massachusetts adopted measures for the extirpation of the contagion, which were entirely successful. Commissioners were appointed, with authority to slaughter and pay for all herds in which the disease was known or suspected to exist. Besides the animals which died and those disposed of by the selectmen of infected towns, during a temporary suspension of the commission in 1863, 1,164 cattle were condemned to slaughter by the commissioners. The cost to the State was \$77,511.07, including \$10,000 spent by the towns during the suspension of the commission. The total loss to the farmers of the State from the disease was estimated at \$250,000. Since then New England has been free from the plague with the exception of occasional cases carried into Connecticut from New York.

From the Brooklyn case of 1848 the infection was carried into stables in the vicinity, and thence to the cities of New York, Jersey City, and Newark, and its existence has been continuous to this day. Its prevalence among cows fed from the refuse of distilleries led to the swill-milk excitement of some years ago, and it has been clearly shown that the diseased condition of some of those cattle was not due to their stabling or feeding, but to the contagion of the lung-plague. Its spread was promoted by the practice of pasturing cattle promiscuously in open spaces made up of vacant



lots in the outskirts of large cities. At an early day the infection was carried from Brooklyn through the dairy herds of New York, Jersey City, Newark, Elizabeth, New Brunswick, and Trenton to Germantown and Philadelphia. It extended later to Baltimore, and thence to Georgetown and Alexandria. Its ravages have been confined chiefly to the seaboard, from Long Island to Virginia, and its extension has everywhere been due to the same cause, of the mingling of cattle in uninclosed lands near the cities. The spread has been toward the south, in consequence of a similarity of conditions surrounding cities in that direction which are within easy reach of each other. The disease has frequently been carried into Connecticut, along the line of the New Haven Railroad, but has been uniformly stamped out, through the vigilance of the cattle commissioners of that State. It has never spread north from New York beyond the immediately outlying districts of Westchester and Putnam Counties. This immunity, both in that direction and to the west, is attributed to the absence of cities with open, outlying spaces, and the general use of separate inclosed pasture-grounds. Moreover, the current of the cattle-traffic is almost wholly from the West, eastward over the lines of communication to New York.

Investigation shows that this disease, among American cattle, is due wholly to importation and of spread by infection, and, as it is confined thus far to comparatively narrow limits, it might be wholly extirpated, and hereafter kept out by the adoption of proper measures. It is not generated by any of the vicissitudes of weather or climate, by the privations or discomforts of travel, by impure air or by feeding on the refuse of distilleries, or glucose and starch factories, but it is aggravated and its ravages facilitated by some of these causes. The fact that it has never been known to exist except when traceable to contagion is a guarantee that it can be permanently eradicated, but the dangers and difficulties are increasing year by year. In the first place, the cattle-traffic is rapidly increasing. The importation of special breeds is on the increase, and there is a liability, if due precaution is not taken, that diseased specimens may be carried into regions hitherto free from the plague. Should it once get a foothold in the South, where the climate would be favorable to its spread, and especially in the vast unfenced pasturages of the Southwest, it might speedily get beyond control. The increase of the importation of foreign cattle, for breeding purposes, was from 5,684 in number, and \$415,133.92 in value, in 1873, to 21,268 in number, and \$1,245,607 in value, in 1881. Efforts to introduce thoroughbred cattle in stock-raising regions, and to improve the quality of the great herds of the West and Southwest, suggest a danger of the introduction of this plague, and the need of a systematic policy for its extermination and future prevention. A trade in Eastern calves,

sent West from the dairy-farms of New York and Pennsylvania, which has lately sprung up, is also suggestive of danger, and the increased facilities of transportation of cattle creates a growing need of precautions.

The virus of the lung-plague is very persistent and active in a close atmosphere, and is greatly mitigated, if not destroyed, by exposure to the open air. It will sometimes develop after a considerable period of quiescence in close places, and is capable of being carried long distances in clothing or other material. It has been communicated by food upon which infected animals have breathed. Mortality from this disease, as well as facility of transmission, varies with climate, increasing with an increase of temperature, whether due to latitude or the season of the year. In France it has been shown that about 20 per cent of the cattle exposed to the infection resisted it altogether, and 50 per cent escaped death; but in South Africa it is no uncommon thing to lose the whole herd if it is once exposed. Losses in England vary from 50 to 60 per cent. In the United States, mortality increases with the heat of the climate. The period of incubation of the germs after being taken into the system and before the earliest symptoms of the disease are manifested, varies greatly. It is generally stated as from six to sixty days, but it has been known to extend to ninety or one hundred days, and even longer. This prolonged incubation is an additional source of danger, for an animal that has been exposed may be transported a long distance, carrying the infection with it, before the disease shows itself. The symptoms themselves vary in different countries, climates, and seasons, and even different breeds of cattle. Sometimes the disease shows itself abruptly and with great violence, and again it develops slowly and insidiously. It usually begins with a cough, at first slight, and noticed only at intervals. It may be heard only when the animal rises or drinks cold water. It is usually weak, short, and husky, but may be painful, and accompanied by arching of the back. As the disease advances, the animal grows dull and sluggish, is apt to be found lying alone, apart from the herd, eats and ruminates tardily and breathes more quickly; the hair, especially about the neck and shoulders, becomes erect and dry, the muzzle has intervals of dryness, the milk diminishes, the eyes lose their prominence and luster, the eyelids and ears droop, the limbs and the roots of the horns become alternately hot and cold. By this time the diseased condition of the lungs may be ascertained by percussion and auscultation; the breathing being accompanied by harsh, rasping sounds and more or less exudation of mucus. As seen in America in winter, the violence generally attributed to the disease does not appear. The victims fall off rapidly in condition, show a high fever for a time, and the diseased portion of the lung becomes encysted as a dead mass.



In the extreme heat of summer and in hot climates, the breathing becomes short, rapid, and labored, and often each expiration is accompanied by a grunt. The nostrils become retracted, and the animal stands most of the time with feet apart, head extended, eyes prominent and glassy, back slightly raised, and is incapable of most of the normal functions of life. Where the disease takes the violent form, there is not only great mortality, but a rapid culmination, while the milder cases are slower and more prolonged.

The result of study extending over a considerable period is the belief that the lung-plague is due to bacteria, which, being taken into the lungs by the breath, make their way through the delicate lining of the air-cells and multiply, destroying the integrity of the tissues and causing inflammation and exudation. Inoculation has been tried, with results of disputed value. Inoculation is generally made at the tip of the tail, where the connective tissue is scanty and the lymphatic system poorly developed. It causes a harmless swelling, and is believed to diminish at least the liability of the animal to the infection. It is also considered effective in reducing the liability to a fatal termination in case the lungs are attacked. The risks connected with inoculation are due to the fact that the real virus of the disease is used, and that the effect is the actual development of the disease, though localized and confined in its effects. A somewhat insidious danger arises from the fact that the infection is sometimes carried for a considerable period, and communicated by means of the encysted masses in the lungs of animals that have recovered. These sometimes continue for a year or more. Cases have been known of infection from inoculated cattle, and it is believed that a general resort to that preventive would simply spread the disease.

The subject of this lung-plague of cattle in the United States has been investigated by a commission of the Treasury Department, whose report was submitted to Congress in February of this year. They found no evidence of its existence in New England, or west of the Alleghany Mountains. At the time the examination was made "not a shadow of suspicion of lung-plague could be thrown upon our Western herds." After recounting the evidence on this point, the commission said: "We claim, therefore, with the utmost confidence, that up to the end of the year 1881 the lung-plague of cattle has been confined to the vicinity of the Eastern seaboard, extending from Putnam County, New York, to Fairfax or Prince William County, Virginia. Connecticut is sound, and North Carolina is sound, so that at present the infection is confined to the States of New York, New Jersey, Delaware, Pennsylvania, Maryland, and Virginia, and the District of Columbia." The commission took the ground, however, that within the area described the plague is in no way disappearing, but they found the

practice prevalent of killing animals and disposing of them for beef when the symptoms of the disease showed themselves. They also discovered that efforts to conceal its existence were common among the owners of dairy herds. Many cases of the plague were found in and about New York city, Newark, N. J., Philadelphia, Baltimore, in the District of Columbia, and in Virginia adjacent to the District. In all these cases there has probably been more or less interchange among the herds. In the opinion of the members of the commission there can be no guarantee of health for cattle going from any of these cities, until a better system of precautions is established. They favor a prohibition of any movement of cattle from one of the infected States without a quarantine of ninety days, such as is required in the importation of foreign cattle. They would also have the carrying of cattle through infected States in either direction, from one uninfected State to another, confined to through trains, which do not stop to take up cattle or unmanufactured cattle-products, such as hides, horns, hoofs, etc. They would also have bonded markets established in the infected States for all cattle intended for export or store purposes. By care in inspection and in transmission from bonded markets to vessels, or places of sale, the commission deem it possible to prevent absolutely any spread of the infection through the cattle-traffic. They favor a strict quarantine of imported foreign cattle, and more efficient provision for sanitation of vessels and railroad trains used in the conveyance of livestock.

Aside from precautions intended to prevent the transmission and spread of the lung-plague, the commission made practical suggestions for stamping it out of existence in the States where it now prevails. In order to do this, they maintain that Federal action is necessary, in addition to such effort as separate States may be induced to make, because harmonious action and a single control are essential to success. Moreover, national authority alone is competent to interfere in the regulation of traffic from one State to another, and with foreign countries. Restrictions upon local markets would be necessary, even to the extent of closing them, but it is contended that this would be within the purview of Federal authority, in dealing with an infection which concerns commerce in its interstate and foreign aspects. The commission would place all abattoirs and fat-cattle markets under supervision, mainly for the purpose of preventing any cattle entering them to be taken away again alive. They would also have all movement of cattle from city to city, or town to town, in the infected States, permitted only under license. And, most important of all, there should be authority to enter premises to ascertain the presence of the contagion, and to slaughter whole herds among which it is discovered, with fair compensation to the owners.



This point is regarded as of great importance, as the most effectual and economical means of utterly stamping out the plague. Power is also demanded for prohibiting pasturage or exposure in unfenced lots where different herds are likely to mingle together, or stray animals to enter among others. Finally, it is recommended that the task of stamping out the lung-plague be confided to national agents, with power to take all necessary measures and means to carry them out, including payment for slaughtered herds. In summing up their conclusions and recommendations, the commissioners say:

For the extinction of the lung-plague in infected districts, we consider it necessary that the authority—Federal or State—intrusted with the work should be clothed with the following power:

a. To abolish or regulate markets for store-cattle in the infected districts.

b. To require the slaughter at the fat-markets, in infected districts, of all cattle entering these markets. Fat cattle, for slaughter elsewhere, can be obtained at the bonded market.

c. To prohibit all movement of cattle in infected districts, except under special license.

d. To inspect all cattle in suspected districts.

e. To slaughter all infected cattle, and in exceptional cases those that have been exposed to infection.

f. To have the condemned animals appraised, and the owners liberally indemnified.

g. To prohibit all exposure of cattle on highways, or on unfenced or insecurely-fenced places in infected districts, or of suspected cattle on a lot adjoining one occupied by healthy cattle, or bordering on a highway.

h. To prohibit all pasturage of more than one herd on one pasture in infected districts, unless under special license.

i. To disinfect all premises, fodder, and other articles that have been presumably exposed to inspection.

j. To institute and enforce such minor rules as shall be demanded by the peculiar conditions of particular districts.

k. To provide and enforce suitable penalties for infringement of orders.

In order to carry out these suggestions, we recommend a liberal appropriation by Congress, to be disbursed by some designated Federal officer. In case the work be delegated to the different States, we advise that a liberal appropriation be made from the Federal exchequer, sufficient to cover the greater part of the outlay; and that this be paid over to the Executive of the infected State, on the approval of the plan and execution of the work in the particular States by a veterinary sanitary organization designated for the purpose by the Federal Government.

This report of the Cattle Commission, which consisted of James Law, E. F. Thayer, and J. H. Sanders, was submitted to the Senate on the 13th of February, 1882, and referred to the Committee on Agriculture; but no action, based on its recommendations, has yet been taken by Congress.

**LUTHERANS.** The Evangelical Lutheran Church in North America comprises four distinct general bodies, between which considerable differences of views respecting doctrine and ritual prevail, and twelve independent synods. Its statistical reports are very imperfect. The "Church Almanac" of the Lutheran Bookstore, Philadelphia (General Council), gives statistics of the several general bodies and synods, of which the following are summaries:

	Ministers.	Congregations.	Communicants.
General Council, ten synods.....	665	1,247	205,475
General Synod, South, six synods	111	287	18,225
General Synod, North, twenty-three synods.....	843	1,801	126,875
Synodical Conference, six synods	1,119	1,881	288,117
Twelve independent synods.....	609	1,323	129,324
Total.....	3,317	5,989	767,986

The Synodical Conference is composed of five ordinary synods and the Joint Synod of Missouri, a union of twelve smaller synods containing 774 ministers, 1,012 congregations, and 172,079 souls. The Joint Synod of Ohio, consisting of six smaller synods, with 195 ministers, 300 congregations, and 50,494 communicants, which separated from the Synodical Conference in 1881, is now counted among the independent synods.

"Der Lutherische Kalender" (Brobst, Diehl & Co., Allentown, Pa.) gives:

	Ministers.	Congregations.	Communicants.
General Council.....	658	1,279	205,002
General Synod, South.....	141	289	18,363
General Synod, North.....	847	1,855	128,229
Synodical Conference.....	1,117	1,881	288,117
Independent synods.....	666	1,346	146,077
Total for the whole Church..	3,429	6,180	785,787

According to the computations of the "Kalender," the Church gained during the year, net, 180 pastors, 265 congregations, and 47,485 communicants.

Of eighteen theological seminaries and departments, four are classified as affiliated with the General Council, four with the General Synod, North, four with the Synodical Conference, and one each with six single synods. The literary institutions consist of seventeen colleges, thirteen classical schools, and nine seminaries for young women. The periodicals include eighteen weekly, eleven semi-monthly, thirty-eight monthly, two bi-monthly, three quarterly, and six annual publications, in the English, German, Swedish, and Norwegian languages.

The General Synod, South, was formed during the civil war by the united action of the synods in the Southern States which had separated from the General Synod, North, in consequence of the urgency of the political crisis. It holds fellowship with both the General Council and the Northern General Synod. In its organization, however, it is now like the General Synod, North, having adopted the constitution of that body, with a few modifications, at its formation. Its doctrinal basis is analogous to that of the General Synod; the services of the Church books of the two bodies are the same as to their principal parts; its ecclesiastical usages, church government and life, are of a similar type; and it practices pulpit and altar fellowship with the General Synod, and, as a matter of privilege in exceptional cases, with other evangelical Protestant de-

nominations. The subject of reunion with the Northern General Synod had a prominent place in the deliberations of the meeting of the Synod in 1882, but was finally postponed on the ground that such union was not desirable. It was urged against the plan that the Synod was now on terms of fellowship with both the Northern General Synod and the General Council, and that to unite with either of those bodies would separate it from the other, and put it in an antagonistic position as toward it; would be, in effect, more a measure of division than of union.

The General Synod, South, met in its thirteenth convention at Charlotte, N. C., May 25th. The Rev. J. J. Scherer, of Marion, Va., was chosen president. Resolutions were adopted setting forth the kindly feelings of love entertained by the Synod toward the Lutheran bodies North, and expressing willingness to co-operate with other Lutheran bodies upon an unequivocal Lutheran basis. A committee was appointed to consider measures for church work among the freedmen. The committee on a common service-book for all English-speaking Lutherans, made a report agreeing with the conditions fixed by the General Council, and was continued. Steps were taken to inquire into the expediency of reviving the old Lutheran vesper service as an evening service; and the committee appointed to prepare a Sunday-school book was instructed to mold its service on the ancient matin and vesper service. Reports were made concerning the missions at Richmond, Va., and Atlanta, Ga. An interesting feature of the meeting of the Synod was the reception of the delegates from the North Carolina Synod, which, after a separation of several years, had determined to resume its connection with the General Synod. On the other hand, the Mississippi Synod had withdrawn from the body, but it was hoped that the separation would not be final.

The fifteenth convention of the General Council met in Lancaster, Ohio, November 9th. Representatives were present from nine synods, or from all the bodies connected with the General Council, except the Holston Synod. The Rev. A. Spaeth, D. D., was re-elected president of the body. In the proceedings of this assembly, discussions of doctrines, as means of ascertaining, establishing, and communicating religious truth, are considered equally important with the transaction of the practical and administrative business which usually engage the attention of ecclesiastical judicatories; and a summary of theses on some subject of doctrine or government is usually prepared in advance of the meeting, to be discussed by it. The topic selected for discussion at the present meeting was the "Relation of Synods to Congregations, and of Congregations to Synods."

The theses set forth that all power in the Church belongs primarily and exclusively to the Lord Jesus

Christ, and that the Church has no right or authority to ordain or teach except what is "taught by the very letter of God's Word, or derived by just and necessary inference from it, and her liberty conceives those things only which are left free by the letter and spirit of God's Word." The primary bodies, the theses continue, through which the power of the Church is nominally exercised, are the congregations. "The congregation, in the normal state, is neither the people without the pastor, nor the pastor without the people. In congregations exists the right of representation. In addition to the pastor, who, by their voluntary election, is already *ex-officio* their representative, the people have the right to choose representatives from their own number to act for them, under such constitutional limitations as the congregation approves. The representatives of congregations thus convened in synod, and acting in accordance with those conditions of mutual congregational compact which are called a constitution, are, for the ends, and with the limitations defined in it, representatively the congregations themselves. A free, scriptural general council, or synod, chosen by the Church, is, within the metes and bounds fixed by the Church which chooses it, representatively that Church itself." The congregations representatively constituting the various district synods may, through those synods, elect delegates to represent them in a more general body, which may bind them, so far as the terms of their mutual agreement make its acts binding. If, however, "the final decision of any general body thus constituted shall seem to any synod within it in conflict with the faith, involving violation of the rights of conscience, it is the duty of that synod to take such steps as shall be needed to prevent a compromise on its part with error. To this end it may withdraw itself from relations which make it responsible for departure from the faith of the Gospel, or for an equivocal attitude toward it. Such steps should not be taken on any but well-defined grounds of conscience, not on mere suspicion, nor until prayerful, earnest, and repeated efforts to correct the wrong have proved useless, and no remedy remains but withdrawal.

"The obligation under which congregations consent to place themselves, to conform to the decisions of synods, does not rest on any assumption that synods are infallible, but on the supposition that the decisions have been so guarded by wise constitutional provisions as to create a higher moral probability of their being true and rightful than the decisions in conflict with them, which may be made by single congregations or individuals. All final decisions should be guarded with the utmost care, so that they shall in no case claim without just grounds to be the judgment of those congregations in whose name and by whose authority they are made—in the absence of which just grounds they are null and void."

In the formation of a general body, the synods may know and deal with each other only as synods. In such case the official record is to be accepted as evidence of the doctrinal position of each synod, and of the principles for which alone the other synods become responsible by connection with it. The leading objects for which synods should be organized are defined to be the maintenance and diffusion of sound doctrine; the decision of controversies in regard to articles of faith; the proper regulation of the human externals of worship; the maintenance of pure discipline; and the devising and executing of wise and scriptural counsels and plans for carrying on the work of the Church, in every department of beneficent labor for the souls and bodies of men, at home and abroad; all in subordination to God's Word and the standards and authority of the Church.



The report of the Committee on Home Missions related what had been accomplished in the missions in Germany, Canada, Michigan, Texas, and in the State of New York, and stated that nine laborers had been sent to sixteen different fields during the past year, and sixteen young men were securing aid in preparation for mission work. Stress was laid, in the discussion of the subject, on the division of the missions in the United States between the German and Scandinavian immigrants, and on the importance of using the English language as the language of the country. The council approved a plan for the home-mission work which contemplated the appointment of three committees, one for the English, one for the German, and one for the Swedish languages, to be equally responsible to the General Council and to have co-ordinate powers; constituted the (Swedish) Augustana Synod's Central Committee on Missions, the Swedish Committee of the General Council, and provided that the English and German committees should consist of twelve persons each, ten of whom should be elected by the General Council and two by the committee. The object of the committees was declared to be to plant and sustain Lutheran churches, but it was forbidden to establish or have control of missions within the territory of a synod in regular connection with the General Council, except in co-operation with and through the agency of the Executive Committee of Missions of such synod, or with its consent. A report on the sources of supply of men for German mission work showed that most of the missionaries had received their preparation for the ministry at German institutions. Of these students, sixteen still remained here under the care of the committee in preparation for the ministry. The Rev. Mr. Paulson's Institution, in Kropp, Schleswig, was recommended as a suitable institution, it being in doctrinal position and in its aim most in accordance with the wants of the General Synod to look to for students. The committee was, however, authorized to select suitable men at its discretion for immediate employment. The committee was further instructed to consider whether it is necessary to establish any additional institution or department in any existing institution in the United States to meet the special wants of the Church. A special committee was appointed to open correspondence with the committee appointed by the General Lutheran Conference in Germany for the purpose of securing the transfer of the emigrants who are members of Lutheran churches into regular connection with the churches in America. A committee to secure sites for churches and schools along the line of the Northern Pacific Railroad was continued.

The East Tennessee Synod, an independent body, has been reorganized on a basis which declares that the congregation alone has the right to call or depose pastors; refuses fellowship with "the sects"; prohibits membership

in oath-bound secret societies; and holds that the Lutheran Church only teaches the pure Word of God.

LYNCH, PATRICK WILSON, born March 10, 1817, at Cheraw, S. C.; died February 26, 1882, at Charleston, S. C. Bishop Lynch studied theology first at the Catholic Seminary at Charleston, acquiring at the same time a knowledge of the classics, science, and mathematics. Subsequently he went to Rome and diligently pursued his education in the historic college of the Propaganda, having access also to the library of the Vatican. In 1840 he was ordained priest, and zealously devoted his time and talents to the advancement of Catholicism in Charleston. Soon he became Professor of Theology and rector of the seminary of that city, his great scholarship and ecclesiastical attainments enabling him to fill the position with distinguished ability. In 1850 he was made Vicar-General of the diocese, much to the delight of his people, whose love and confidence he had won. Eight years after, he was consecrated Bishop of Charleston. Immediately after his consecration, he began the work of acquiring funds for building a cathedral: his plan of procedure was so perfect, and he inspired such enthusiasm in behalf of his work, that in a very short time he collected a sufficient sum to begin the building, which in time was finished, and valued as one of the most ornamental buildings of Charleston. His labors for his church did not end with the completion of the cathedral; he founded an Ursuline Convent, an orphan asylum, and several schools. In the late war some of these buildings were destroyed, among them the beautiful cathedral. The Bishop identified himself very conspicuously with the cause of the Confederacy; he made a special visit to Rome to try and induce the Pope to recognize the Southern States, and worked unceasingly with his associates in that direction. Pardoned by the President at the end of the war, he returned to Charleston and began his work with renewed energy. The best years of his life were devoted to the arduous task of liquidating an enormous debt contracted by the diocese before he was made bishop; his efforts were so successful that at the time of his death only a small sum comparatively remained of the indebtedness. Only the people of his diocese knew the hardships and distresses through which he passed during the accomplishment of this work.

For the same object, he delivered a lecture, in 1870, in New York city, on the "Vatican Council," and again in 1873 on "Bismarck and the Church." His fame as a learned and accomplished orator had preceded him, and vast audiences crowded to hear him. These were only two of the many lectures he delivered for the same object, not alone in New York but in most of the large cities of the United States. As a controversialist Bishop Lynch was eminent, as he proved on numerous occasions, in his able arguments with opponents of his church.

Notably among these are those directed against Bismarck and Gladstone. One of his most distinguished sermons was preached on the occasion of the laying of the corner-stone of the new church of St. Francis Xavier, in New York. As a writer of scientific articles Bishop Lynch was also distinguished. "The Liquefac-

tion of the Blood of St. Januarius," and the "Transit of Venus," are two of his most celebrated. He participated in the Vatican Council of 1869-'70, and ably supported the dogma of infallibility. A short time before his death, the Pope had assigned him a chair in the college at Rome.

## M

MACDONALD, Sir JOHN ALEXANDER, Prime Minister of the Dominion of Canada, was born in 1815, educated in Kingston at the grammar-school, and was called to the bar in 1835. He entered political life as a member of the Parliament of Upper Canada. He was elected in the Conservative interest in 1844 by the Kingston constituency, which he has continued to represent to the present time. His introduction to office was as a member of the Executive Council and Receiver-General, to which post he was appointed in May, 1847. In December of the same year he took the office of Commissioner of Crown Lands. In March, 1850, the Cabinet of which he was a member gave way to the Reform Ministry under Lafontaine, Baldwin, and Hincks, which remained in power till September, 1854. At that time the difficulty with regard to the reservation of lands for the Protestant clergy and other questions caused a defeat of the ministry, and a coalition was formed to conduct the public business. Macdonald joined the Government as Attorney-General. He retained this office until May, 1862. A part of this time he was the head of the Government. In January, 1862, upon the reorganization of the militia, he took the position of Minister of Militia. The Government sustained a defeat on their militia bill of that year, and all resigned. In May, 1864, Macdonald resumed office as Attorney-General in the ministry of Sir E. P. Tache, which was not, however, in command of a stable majority. At this time the question of federation was under discussion. The proposition had adherents in both parties. Upon a report in its favor by a committee of the Legislative Assembly, a conference of the leading men of both parties was held, which led to a coalition for the purpose of carrying the proposition through. On the death of Sir E. P. Tache, in 1865, Mr. Macdonald again became Minister of Militia, which office, with that of Attorney-General, he retained until 1868. In that year, upon the consummation of the federation, he became Minister of Justice and Attorney-General in the Dominion Government, and in 1869 assumed the premiership. The ministry of which he was the head resigned November 5, 1873. In October, 1878, he was called upon to form another Cabinet. In 1866 he served as one of the delegates appointed to confer with the Imperial Government with reference to the terms of confederation, and

was chosen president of the meetings by the delegates in London. He was knighted in 1867, and was honored with a doctor's degree by Oxford University in the same year. Sir John A. Macdonald is the undisputed leader of the Conservative party in Canada, which under his guidance introduced the protective policy, and has almost silenced the formidable opposition of the Liberals. His abilities in debate, in affairs, in political tactics, and in the inception of policy, are so conspicuous that he occupies a most commanding position among parliamentary leaders.

MADAGASCAR, a large island off the eastern coast of Africa. The area is 591,964 square kilometres, or about 227,600 square miles. The population is estimated at from 3,500,000 souls to double that number. The inhabitants call themselves Christians, the Presbyterian Church having been established as the state religion of the Hovas. The capital, Tananarivoo, situated in the interior of the island, contains from 70,000 to 80,000 inhabitants. The chief commercial town is Tamatav, a town of about 3,000 inhabitants, on the eastern coast. The foreign commerce is conducted principally in English ships coming from Mauritius. One of the principal articles of import is rum. American traders have a large share in the foreign commerce. The exports are principally cattle, hides, resins, India-rubber, gums, tallow, oil-bearing seeds, rice, etc. The trade with Mauritius in 1873 consisted of £155,000 of exports and £145,000 of imports. The commerce with other countries was estimated at £100,000. Ships and pirogues also visit Madagascar from the small French colonies adjacent.

The inhabitants belong to two distinct races. The aborigines, known by their mahogany color, have been overrun at a comparatively recent epoch by a Malaysian race, whose type is found in its purity among the Hovas. The new-comers were at first divided into twelve independent tribes, but at the beginning of the present century they merged, and adopted monarchical institutions and such features of civilization as an army, police, taxes, and customs duties. They have constantly opposed the industrial development of the vast natural wealth of Madagascar, declaring fevers and bad roads to be blessings because they protect them from the Europeans. The Hovas have a nobility of various degrees and privileges. Children take the rank of their mother. There





*Sir Alexander Macdonald*  
*Prime Minister of the Dominion of Canada*





are two classes of slaves, those of the King and those of private individuals. The royal slaves are of two races—negroes from the continent, and the dark Malagassy natives. The latter perform lighter services, and are permitted to marry free women. The black slaves serve in the army, and sometimes attain military rank or fill important civil posts, but they are not allowed to marry out of their class. Private



slaves are either Hovas, debtors, or criminals, Malagassy natives, or Africans. The yoke of slavery is very easy, no master exacting anything which he would not do himself. The Hovas are more energetic than the other tribes, and less addicted to drunkenness. They are a little below the medium height, broad-shouldered, olive-complexioned, have smooth, coarse, thick hair, aquiline noses, eyes slightly inclined, and high cheek-bones. The national costume, consisting of a large square piece of cloth, usually white, draped over the figure, is gradually giving place to European vestments. Polygamy is permitted but rarely practiced. The people marry and divorce themselves with but little trouble or ceremony. The Malagassy religion is gross fetichism and belief in sorcery.

Coal and iron abound in Madagascar. There are ninety-six species of woods, among them iron-wood, veck-wood, and rose-wood. Cotton and rice yield one crop a year. Sugar-cane, coffee, tobacco, and spice-trees thrive wonderfully. Cattle are abundant and cheap, the

usual price for a head of horned cattle being five dollars, for a sheep two shillings. The climate of the interior is wholesome for Europeans, but the fevers of the coast are deadly.

English missionaries—Presbyterians, Methodists, and Quakers—have long been active in their efforts to evangelize the people. The Hovas rulers have promoted their efforts, and officially adopted Christianity of the Protestant form for political reasons, desiring to escape the territorial claims of France to the island, and raise up allies for their cause. The French Jesuits who preceded the English are for the same reason discouraged. The British Government have sometimes encouraged these political objects of the missionary societies.

The French counted Madagascar among their possessions when they established colonies in these seas, and under Richelieu the monopoly of its trade was given to a company. In 1810 the chief of the Hovas subjugated all the tribes of the island, and assumed the title of King Radama I. He entertained relations with the British Government; but these were interrupted for a long time after the accession of Queen Ranavolo I to the throne in 1828. She was succeeded by her son, Radama II, with whom Lambert concluded a treaty in the name of France. In 1865 she concluded treaties of amity and commerce with England and the United States. Ranavolo II, the present Queen, succeeded to the throne in 1868. She concluded another treaty with France in that year. The tribes on the western side of the island, with the aid and encouragement of the French, threw off the yoke imposed upon them by Radama I. These Sakalava tribes stand under a French protectorate, by virtue of treaties. Queen Ranavolo recently conceived the design of re-establishing the Malagassy kingdom in all parts of the island. A dispute arose with the commander of the French naval squadron, who laid an embargo upon a ship belonging to the Malagassy Government in the port of Tamatava and pulled down the Malagassy flags displayed on the west coast. A special embassy was dispatched in July to Europe to appeal to the different governments, and endeavor to bring the French to grant the position taken by the Malagassy authorities. The embassy found the public in Great Britain strongly prejudiced in their favor, but the British Government was not disposed to seek a new cause of difference with France and officially resist the French pretensions. The French Government assumed the same arrogant tone as its agents, Commander Le Timbre and Consul Baudrais. It pretended to jurisdiction over the whole island, threatening to recall the acts recognizing the independence of the Hovas, unless they respected the territory of the Sakalavas, over whom the French Government exercises a protectorate. The envoys were finally dismissed brusquely and virtually driven out of Paris. They visited Germany, and subsequently came to the United States, offering

exceptional commercial privileges in return for moral support against the French encroachments.

**MAINE. STATE GOVERNMENT.**—The following were the State officers during the year: Governor, Harris M. Plaisted, Fusion; Secretary of State, Joseph O. Smith; Treasurer, S. A. Holbrook; Attorney-General, Henry B. Cleave; Adjutant-General, George S. Beal; Superintendent of Common Schools, N. A. Luce; Insurance Commissioner, Joseph B. Perks; Railroad Commissioners, A. W. Wildes, John F. Anderson, and C. J. Talbot; State Librarian, Josiah S. Hobbs. Supreme Court: Chief-Justice, John Appleton.

**FINANCES.**—The following financial statement covers the receipts of 1881 and receipts and expenditures of 1882:

The cash in Treasury January 1, 1881, was..... \$160,888 64  
The receipts during the year were..... 1,417,526 88

Total..... \$1,577,865 47  
The expenditures during the year were..... 1,485,460 21  
The cash in Treasury December 31, 1881, was..... 142,405 26

Total..... \$1,577,865 47

The receipts for the year 1881 were from the following sources:

State taxes..... \$1,104,145 77  
County taxes..... 9,404 50  
Taxes on savings-banks..... 177,887 66  
Tax on railroad, telegraph, and insurance companies..... 73,192 88  
Sale of bonds issued by the State College of Agriculture and Mechanic Arts..... 80,000 00  
Interest on deposits and taxes..... 1,967 97  
Miscellaneous sources..... 15,928 60  
\$1,417,526 88

Cash on hand January 1, 1882, was..... \$142,405 26  
The receipts during the year were..... 1,482,130 20

Total..... \$1,574,585 46  
The expenditures during the year were..... 1,069,880 94  
The cash in Treasury December 31, 1882, was..... 474,704 52

Total..... \$1,574,585 46

The receipts for the year 1882 were from the following sources:

State taxes..... \$1,055,289 62  
County taxes..... 11,501 06  
Tax on savings-banks..... 206,469 43  
Tax on railroad, telegraph, express, and insurance companies..... 188,601 89  
Interest on deposits and taxes..... 10,532 81  
Miscellaneous sources..... 9,785 89

Total..... \$1,482,130 20

The expenditures for 1882 were as follow:

Public debt..... \$52,000 00  
Interest on public debt..... 826,912 00  
Sinking fund..... 50,479 95  
Educational purposes..... 370,005 43  
Agricultural purposes..... 8,776 50  
State College of Agriculture and Mechanic Arts..... 1,000 00  
Penal and reformatory institutions..... 24,815 40  
Sundry other institutions..... 11,400 00  
Insane and other State paupers..... 44,299 87  
Military purposes..... 15,235 66  
Pensions..... 19,582 70  
Railroad and telegraph taxes paid to towns and cities..... 14,727 09  
Indian tribes..... 18,785 85  
County taxes paid..... 9,884 49  
Miscellaneous and current expenses of the State government, including salaries of all State officers, judges, and county attorneys..... 107,487 10

Total..... \$1,069,880 94

# LIABILITIES AND RESOURCES.

	Jan. 1, 1882.	Jan. 1, 1883.
<b>LIABILITIES.</b>		
Bonded debt.....	\$5,801,900 00	\$5,749,900 00
Trust fund.....	707,288 59	719,081 98
Due School-District No. 2, Madison.....	1,000 00	1,000 06
Soldiers' bounty scrip.....	800 00	800 00
Balance due on school fund, rolls of accounts, interest, and warrants uncalled for, etc.....	414,679 86	459,065 82
County taxes collected.....	8,269 51	11,486 68
Total.....	\$6,938,952 96	\$6,941,284 48
<b>RESOURCES.</b>		
Sinking fund.....	1,486,867 29	\$1,571,185 08
Uncollected taxes.....	1,005,029 79	1,011,722 85
Cash in Treasury.....	142,405 26	474,704 52
Balance, net indebtedness of State.....	4,850,150 62	3,888,672 88
Total.....	\$6,938,952 96	\$6,941,284 48

**STATE DEBT.**—The total bonded debt of the State, less the sinking fund:

January 1, 1881..... \$4,576,048  
" 1882..... 4,365,588  
" 1883..... 4,178,715

The State continues to make provision, to a limited extent, to alleviate the pressing necessities of the deserving soldiers and seamen of the late war, who incurred disability in the service, and of their widows, orphans, and dependent parents. The appropriation for 1882 was \$22,000; the amount expended was \$20,550.10; the number of applicants was 757; the number allowed was 611.

The first savings-bank in Maine was the Saco and Biddeford Savings Institution, organized May 27, 1827. There are now in active operation fifty-five, all but six of which have been chartered since 1865.

In 1860 the deposits were..... \$1,466,457 56  
" 1870 " "..... 6,579,888 78  
" 1880 " "..... 28,277,675 82  
" 1881 " "..... 26,474,555 97  
" 1882 " "..... 29,508,889 71

On the ground that the earnings of savings-banks must necessarily grow smaller as the old securities mature and new investments are made, the Bank Examiner calls attention to the fact that the State tax of one per cent on the deposits has become disproportionate to their income, and recommends that a reasonable reduction be made.

## AGGREGATE STATEMENT OF SAVINGS-BANKS, NOVEMBER 1, 1882.

	Liabilities.
Deposits.....	\$29,508,889 71
Reserved fund.....	958,888 19
Special reserved fund.....	117,556 51
Profits and interest.....	776,698 74
Other liabilities.....	73,598 09
Total.....	\$31,430,686 24
<b>Resources.</b>	
Cash on hand and on deposit.....	\$872,799 58
United States bonds.....	5,641,157 89
State of Maine bonds.....	58,875 00
Other public funds.....	9,407,881 87
Railroad bonds.....	2,690,589 98
Bank-stock.....	1,408,307 83
Other investments.....	1,050,964 21
Real estate owned.....	1,149,282 10
Loans on mortgages of real estate.....	5,180,472 56
Other loans.....	8,964,905 83
Total.....	\$31,430,686 24



The number of depositors in these banks during the year increased 7,512, the total number being 95,487, of whom 76,602 were depositors of sums not exceeding \$500 each. The average amount to the credit of each depositor was \$308.87.

**STATE INSTITUTIONS.**—On December 1, 1881, there were in the Insane Hospital 450 patients (240 men and 210 women); admitted during the following year, 194 (114 men and 80 women); in all, 644; discharged, 183 (103 men and 80 women); remaining December 1, 1882, 461 (251 men and 210 women). The hospital has been in operation forty-two years, during which 5,953 patients have been admitted and 5,492 discharged. Of the latter 2,272 recovered, 1,089 improved, 979 did not improve, and 1,154 died. The daily average number of patients for the year 1881-'82 was 449.

The number of prisoners in the State-Prison November 30, 1882, was 147, a falling off of 37 since the corresponding date of 1881. There is a marked increase in the number of life-sentences. In 1870 the number was 10, or 6 per cent of the whole number of convicts; in 1876 it was 18, or 10 per cent; now the number is 36, or 25 per cent. The net cost to the State for the past two years above earnings has been about \$90 per annum to each convict. The manufacture of shoes, being a losing business, has been abandoned, and that of carriages increased.

During the eight years that the Industrial School for Girls has been in operation, 148 girls have been admitted to the institution. Of this number, 81 are now in good homes provided for them, 8 have been returned to friends, 2 sent to the Orphan's Home at Bath, 3 have escaped, 6 have been dismissed and 4 have deceased, leaving 44 now in attendance. The average attendance for the years 1881 and 1882 was 39 and 40 respectively.

The commission appointed to investigate the State Reform School found the buildings and other property in good condition, the boys well fed and comfortably clad, but the discipline harsh, the punishments extremely severe in some instances, and the mingling of bad and depraved boys with the better class of boys in the institution an evil of large proportions. Very little complaint is made of the care bestowed upon the sick.

The whole number of boys who have been received into the institution since it was opened is 1,711; 1,084 were committed for larceny, 190 for truancy, and 104 for being common runaways.

Number of boys in school December 1, 1881.....	118
"    " committed the past year.....	24
"    " previously out on leave, returned.....	4
"    " previously escaped, returned.....	2
Whole number in school during the year.....	143
"    " discharged.....	6
"    " allowed to go on trial.....	22
"    " indentured.....	1
"    " died.....	2
"    " illegally committed.....	2
Number of boys remaining, December 1, 1882.....	110

The total receipts from December 1, 1881, to December 1, 1882, were \$21,742.60; expenditures, \$21,716.40.

**EDUCATION.**—The number of scholars in the State in 1881 was 213,927; in 1880, 214,656; a decrease of 729. The whole number attending school in 1881 was 150,067; in 1880, 149,829; an increase of 240. The decrease in the number of children of school age has been constant since 1870, with the exception of one year, and in eleven years amounts to the aggregate of 14,240. While there has been a decrease in school population, there has been a steady gain in attendance upon the schools. The number of school districts in the State is 3,966; 39 towns have abolished the district system. There are 4,308 school-houses, 3,039 of which are reported in good condition. During the year 57 school-houses were erected, at an aggregate cost of \$95,347. The estimated value of all the school property in Maine is \$3,026,395. The number of male teachers employed in summer schools is 305; male teachers in winter schools, 2,257. Number of female teachers employed in summer schools, 4,638; in winter schools, 2,431. Total number of teachers in summer schools, 4,988; in winter schools, 4,688. Of these teachers, 457 are graduates of normal schools, and 4,713 of them have had previous experience. The average wages of male teachers per month, excluding board, is \$28.23; of female teachers, \$14.52. The number of towns electing supervisors was 274, an increase over 1880 of 22; number electing school committees, 223, a decrease of 19. The total school resources for the year were \$1,047,229. Of this amount, \$706,521 came from town treasuries; \$316,439 from the State, and \$24,269 from local funds. The amount expended for common schools—current expenses—was \$965,697, leaving an unexpended balance of \$81,532.

The average number of scholars per teacher in the summer schools throughout the State was 24, and 26 in the winter. This includes both graded and ungraded schools.

There are 101 towns in the State where free high-schools are maintained, an increase of 15 over 1880. The total cost of these schools was \$69,469, of which the State paid \$16,910.

The State Agricultural College has an endowment from the national Government of \$232,500, yielding an annual revenue of about \$7,500. It has received from the State \$187,218. It has buildings, grounds, library, apparatus, farming-tools, stock, etc., valued at \$145,000. It has required from the State, in addition to the income from the national endowment, less than \$3,500 a year for the purposes of instruction and for all current expenses, and has graduated 180 students and given instruction to 201 other students in special or partial courses varying from a single term to three and a half years. The present freshmen class numbers 18, a number estimated at less than one half what it would have been if free tuition had been maintained.

## RAILROADS.

NAME OF RAILROAD.	Miles.	Whole length main line operated.
Aroostook River Railway .....	80	80
Atlantic and St. Lawrence (Grand Trunk).....	82½	149 5
Androscoggin (Maine Central), viz.:		
Bath branch.....	8½	
Brunswick to Farmington, including branch to Lewiston.....	66 9	75 65
Bangor and Piscataquis.....	62 5	62 5
Bangor and Katahdin Iron Works Railway.....	19	19
Belfast and Moosehead Lake (Maine Central).....	83	83
Boston and Maine.....	44	116
Bridgton and Saco River.....	15 5	15 5
Bucksport and Bangor.....	18 8	18 8
European and North American (Maine Central).....	114 2	114 2
Grand Trunk.....		1,388 5
Houlton branch (New Brunswick and Canada).....	8	8
Knox and Lincoln.....	49	5
Lewiston and Auburn (Grand Trunk).....	5 5	5 5
Lewiston and Auburn Horse.....	5	5
Maine Central (to Bangor <i>via</i> Augusta, inclusive of Portland and Kennebec, 63 miles).....	136 6	136 6
Maine Central (Cumberland <i>via</i> Lewiston to Waterville).....	72 93	72 93
New Brunswick (Aroostook River).....		174
New Brunswick and Canada (Houlton branch).....		128
Newport and Dexter (Maine Central).....	14	14
Norway Branch (Grand Trunk).....	1 5	1 5
Old Orchard Junction.....	2 5	2 5
Ocean Street Horse.....	1 5	
Orchard Beach.....	8	3
Portland and Kennebec (Maine Central).....		
Portland and Ogdensburg.....	51	110
Portland and Rochester.....	49 5	52
Portland, Saco, and Portsmouth.....	50 75	51
Portland (horse).....	7 25	7 25
Portsmouth, Great Falls, and Conway.....	2 2	2 2
Rumford Falls and Buckfield.....	27 5	27 5
Sandy River.....	15	15
Somerset.....	25	25
Somerset and Kennebec (Waterville to Skowhegan, Maine Central).....	18 19	37 75
St. Croix and Penobscot.....	18	22
St. Croix (New Brunswick and Canada).....	50	
Whitneyville and Machias.....	7 5	7 5
Total.....	1,065 89	8,066 68

## FINANCIAL CONDITION.

NAME OF ROAD.	Total income.	Total expenses, including taxes.	Net income.	Total assets.	Capital stock.	Funded debt.	Total liabilities.
Aroostook River.....	\$957,658 74	\$387,815 45	\$119,843 29	\$3,484,000 00	\$5,484,000 00	\$3,000,000 00	\$3,484,000 00
Atlantic and St. Lawrence.....	117,199 55	62,092 10	55,107 45				
Bangor and Piscataquis.....	36,634 95	270 00	36,904 95		643,100 00	150,000 00	886,000 00
Belfast and Moosehead Lake.....	2,384,041 48	1,929,857 66	904,183 92	12,450,623 48	6,921,264 52	8,500,000 00	12,450,623 48
Eastern Maine.....	15,851 50	9,473 42	5,878 08	585,183 68	501,607 50	52,857 50	585,183 68
Dexter and Newport.....	18,000 00	42 00	17,958 00	297,863 60	122,000 00	175,000 00	297,863 60
European and North American.....	552,462 42	824,327 91	223,194 51	3,788,825 51	2,886,800 00	1,019,000 00	3,788,825 51
Great Falls and Conway.....	45,045 82		45,045 82	2,151,657 51	1,150,000 00	1,000,000 00	2,151,657 51
Houlton branch.....							
Knox and Lincoln.....	143,973 17	89,717 14	54,261 03	2,759,580 00	864,580 00		2,759,580 00
Maine Central.....	2,082,462 58	1,359,373 45	723,089 13	12,827,908 57	3,020,100 00	8,702,591 26	12,827,908 57
Portland (horse).....	56,386 06	51,794 36	4,601 70		157,600 00		
Portland and Ogdensburg.....	234,173 09	247,369 49	106,303 60	4,393,832 73	1,052,185 55	8,063,000 00	4,393,832 73
Portland and Rochester.....	201,847 70	195,321 26	6,526 44	617,756 25	580,168 20		617,756 25
Portland, Saco, and Portsmouth.....	90,536 92		90,536 92	1,506,175 64	1,500,000 00		1,506,175 64
Rumford Falls and Buckfield.....	50,877 68	37,816 00	13,061 68			137,000 00	
Sandy River.....	15,212 24	12,747 00	5,465 24	126,688 24	69,256 56	50,000 00	
Somerset.....	27,792 64	27,385 52	407 12	921,628 37	879,054 44	450,000 00	921,628 37
St. Croix.....							
St. Croix and Penobscot.....	45,862 95	36,909 19	8,953 76	373,069 19	100,000 00	165,500 00	373,069 19
Orchard Beach.....	4,369 27	4,554 45		70,132 89	50,000 00		70,132 89
Machiasport Railroad.....							

The following new railroad corporations were organized during the year:

**Kennebunk and Kennebunkport Railroad.** The road to extend from a point near the draw-bridge which divides Kennebunk and Kennebunkport village, to a point in the line of the Boston and Maine Railroad, near the depot of said road in Kennebunk. Length, about four and a half miles; gauge, four feet eight and a half inches.

**Monson Railroad Company.** Extending from the depot of the Bangor and Piscataquis Railroad, called Monson station, in the town of Abbott, to the village of Monson in the town of Monson, through the towns of Abbott and Monson. Length of road, about six miles; gauge, two feet.

**Green Mountain Railway.** Between some point in the town of Eden, or Mount Desert, and the summit of Green Mountain in Eden, afore-



said. Length, about one mile; gauge, four feet eight and a half inches.

The Bridgton and Saco River Railroad Company was organized in 1881, but its line was not located till 1882. At the close of the year it had nearly completed the whole line from Bridgton Center to the Portland and Ogdensburg Railroad in the town of Hiram, a distance of fifteen and a half miles. Gauge, two feet.

STATISTICS.—The number of establishments devoted to the lumbering industry are 848, employing 9,839 men, and the total value of all products in 1880 was \$7,933,868. Maine holds the rank of seventh State in the Union in the value of her lumber products, the States of Michigan, Pennsylvania, Wisconsin, New York, Ohio, and Indiana, in the order named, taking the lead.

Maine stands at the head of the great fishing industry of the country. In 1880 the number of persons employed in the industry was 12,662; the number of vessels engaged was 606; the capital invested was \$3,454,302; the value of fishing products in marketable condition was \$3,739,224. The value of the same products in 1870 was only \$979,610.

It is estimated that the number of the inhabitants of Maine who are largely dependent upon the fishing industry for a livelihood will not fall short of 48,000 men, women, and children, which is equal to about  $\frac{7}{8}$  per cent of the population, and when to the result of this labor are added the expense of transportation and profits of handling, and the product is in the hands of the consumer, it represents an industry of nearly \$7,000,000.

The gathering and storing of ice is comparatively a new industry in Maine, but is a profitable one, and gives employment to many. The ice harvest on the Kennebec River and vicinity, in the year 1880, amounted to 1,000,000 tons, an increase of 750,000 tons over 1870.

The following table, giving the tonnage of vessels launched, exhibits the ship-building of the State for four years:

DISTRICTS.	1879.	1880.	1881.	1882.
Passamaquoddy....	82-81	.....	182-90	88-73
Frenchman's Bay....	283-35	28-89	81-30	246-32
Machias.....	1,523-93	1,007-58	393-80	2,904-40
Castine.....	668-67	1,845-99	1,380-32	1,035-57
Bangor.....	159-81	83-89	1,042-75	1,402-50
Belfast.....	2,598-29	2,257-72	5,677-46	6,681-03
Waldoboro'.....	5,475-20	4,312-94	8,551-00	13,258-63
Kennebunk.....	2,438-02	1,746-47	1,956-09	730-92
Wiscasset.....	41-06	278-69	1,846-58	2,174-59
Portland.....	7,200-39	3,099-11	2,087-10	5,379-53
Bath.....	17,383-59	22,185-92	96,384-13	42,187-71
Aggregate.....	37,584-61	35,847-15	58,992-93	75,084-91

A summary for 1882 follows:

VESSELS.	No.	Tons.
Barkentines.....	12	5,897-02
Schooners.....	124	39,331-52
Sloops.....	7	120-91
Steamers.....	11	4,383-22
Ships.....	14	24,602-94
Total.....	168	75,084-91

The total catch of the Maine fishing-fleet during the year 1882, a total fleet of 289 vessels with a crew of 2,785 men, 71 being on the Grand and Western Banks and 218 on the New England shore and George's Bank, was 73,806 on the former grounds, and 221,911 on the latter, being a total of 195,717 quintals. The total catch of mackerel for the New England fleet was 349,674, of which 119,547 is credited to Maine vessels. The following statement represents the fisheries according to their value: Herring-fishery (including the sardine industry), \$1,043,753; mackerel-fishery, \$659,304; cod-fishery, \$656,753; lobster-fishery, \$412,076; hake-fishery, \$278,336; haddock-fishery, \$225,393. The entire lobster catch of Maine for the year is found to be 14,234,182 pounds, of which 4,739,808 pounds were sold fresh, and 9,494,284 pounds were put up by the 23 canneries located in different parts of the State. The fishing industry of all kinds of Maine includes 600 vessels, of 17,632-65 tonnage, with 8,110 fishermen and 5,920 boats. There are 2,961 curers, packers, and factory hands, and a total of 11,171 persons engaged. There were 202,048,499 pounds of fish taken, of a total value of \$3,614,178. The total capital invested is \$3,375,994.

In 1882 the sales of liquor at the various authorized agencies in the State amounted to \$58,817.42. The sales in the principal cities and towns were as follow: Auburn, \$2,398.80; Bangor, \$8,036.10; Bath, \$2,730.83; Brunswick, \$1,574.85; Bethel, \$3,044.94; Farmington, \$1,462.26; Gardiner, \$1,199.40; Hallowell, \$1,001.68; Hartland, \$1,294.27; Lewiston, \$3,834.05; Machias, \$2,962.17; Portland, \$19,500.86; Rockland, \$2,005.14; Waterville, \$1,638.77.

PARTY CONVENTIONS.—The Republican State Convention met in Portland on the 13th of June, and nominated the following ticket: For Governor, Frederick Robie, of Gorham. For Representatives to Congress, Thomas B. Reed, of Portland; Nelson Dingley, Jr., of Lewiston; Charles A. Boutelle, of Bangor; Seth L. Milliken, of Belfast.

The platform adopted contained the following resolutions:

1. The right of every qualified voter to cast his ballot and have it honestly counted is a fundamental principle of republican government which must be maintained by law impartially enforced. The majority thus determined must rule and the minority must submit.

2. Free schools must be maintained and universal education secured as the basis of national security and prosperity.

3. American industries and labor should be protected against the unjust competition of the product of cheap foreign labor by a protective tariff.

4. American shipping and ship-building should be encouraged by the modification of our navigation laws so as to discriminate in favor of, and not against, our shipping interests, and by such other assistance as the Government may properly render a great national interest. We protest against the persistent efforts of the friends of free trade, or misnamed "revenue reform," to grant American registry to foreign-built

ships, as certain to destroy our ship-building industry.

5. The only full legal-tender money authorized by the Constitution to be coined or issued in time of peace is gold and silver. The dollar of the one should be coined so as to possess the same intrinsic value as the dollar of the other, and all paper currency should be redeemable in the one or the other. We deprecate the efforts made to overthrow the present banking system of the nation, securing as it does to the people a currency convenient, uniform, elastic in volume, of equal value in all the States, and absolutely safe from loss in the hands of the holder. . . .

7. We are unalterably opposed to the abolition or reduction of the internal revenue tax on liquors, and demand that all possible reduction of taxation shall be made on necessities and not upon luxuries. . . .

9. We refer with confidence and pride to the general record of the Republican party, in support of the policy of prohibiting the traffic in intoxicating liquors, the wisdom and efficiency of which legislation, in promoting the moral and material interests of Maine, have been demonstrated through the practical annihilation of that traffic in a large portion of the State; and we favor such legislation, and such enforcement of the law, as will secure to every portion of our territory freedom from that traffic. We further recommend the submission to the people of a constitutional prohibitory amendment.

The Republican candidate for Governor, Colonel Frederick Robie, is a graduate of Bowdoin College, in the class of 1841. He afterward graduated at the Jefferson Medical College, in Philadelphia, and was engaged in the active practice of his profession until the outbreak of the war, in 1861. In that year he was appointed paymaster by President Lincoln, served until the close of the war, and was brevetted lieutenant-colonel for meritorious service. He was elected to the State House of Representatives from Gorham seven times, was Speaker in 1872, and again in 1876, was a member of the Council under Governor Washburn, and was chairman of the Council during Governor Davis's and Governor Plaisted's administrations. Through his influence the Normal School at Gorham was established, and he contributed liberally toward the fund necessary for the erection of the building. In 1878 he was one of the commissioners to the Paris Exposition, and during his absence was made one of the constitutional candidates for Governor, by an agreement among the leaders of the Republican party, and was voted for as one of the candidates for Governor by the Republican members of the Legislature of 1879.

The Fusion (Democratic and Greenback) State Convention met in Lewiston on the 27th of June, and renominated Governor Harris M. Plaisted. For Congressmen, Joseph Dane, Daniel H. Thing, George W. Ladd, and Thompson H. Murch, were nominated.

The resolutions condemn the purchase of votes, assessments of Government officers; demand civil-service reform to the extent of abolishing the spoils system; accuse the Republican party of undermining the foundations of all political morality; destroying the sanctity of the ballot, debauching the people, and paving the way to centralization and empire; demand taxation for revenue only; condemn the appointment of tariff commissioners, on the ground that they are prejudiced in favor of the present iniquitous pro-

tection tariff; condemn the policy which has shut our markets against return freights, and made the international carrying-trade impossible in competition with the ships and products of lower-taxed countries; demand of Congress the establishment and maintenance, at all times, of a currency of general credit, always convertible into and in value equal to specie, adapted to the wants of commerce and the business of the country, and suited to existing circumstances; protest against the substitution of the greenbacks by the bills of banking corporations; demand the abolition of imprisonment for debt; declare in favor of exempting wages from the trustee process; demand that the ten-hour law be made applicable to all classes of labor; condemn the Executive Council for rejecting nominations made by the Governor, on the ground that such action was unconstitutional, illegal, and subversive of the popular will; indorse Governor Plaisted for the dignity with which he has surrounded his high office, and for his devotion to the Constitution, and express pride and pleasure in his renomination. A concluding resolution authorizes the State Committee to call conventions to fill any vacancies in the congressional ticket, and, when an apportionment shall have been made, to appoint district committees.

The straight Greenbackers nominated Solon Chase for Governor. W. T. Eustis was nominated for Governor by the Prohibitionists, and Warren H. Vinton by the Independent Republicans.

**ELECTION RETURNS.**—The election in September resulted in the choice of the Republican candidates. The vote was as follows:

For Governor: Total vote cast, 138,567, of which Frederick Robie received 72,724; Harris M. Plaisted, 63,852; Solon Chase, 1,802; W. T. Eustis, 395; Warren H. Vinton, 270; scattering, 24. Robie's plurality, 8,872. For Congressmen: Thomas B. Reed, 72,925; Nelson Dingley, Jr., 73,017; Charles A. Boutelle, 72,386; Seth L. Milliken, 72,495; Joseph Dane, 63,554; Daniel H. Thing, 63,722; George W. Ladd, 63,381; Thompson H. Murch, 63,568; W. F. Eaton, 1,280; B. K. Kallach, 1,276; Eben O. Gerry, 1,250; Benjamin D. Averil, 1,273; James M. Stone, 556; Henry Tallman, 283; Joseph E. Ladd, 232; Nathan G. Axtell, 284; Charles E. Nash, 257; Daniel Stickney, 184; scattering, 36.

The Legislature chosen at this election is constituted as follows:

	Senate.	House.
Republicans.....	28	109
Fusionists.....	8	48

**MANUFACTURES OF THE UNITED STATES.** The table below shows the statistics of manufactures in the United States as returned by the tenth census for the year ended May 31, 1880. It includes every establishment of mechanical or manufacturing industry which was returned at the census as having had during the census year a product of \$500 or more in value. It does not include manufacture of fishery products, quartz-milling, petroleum-refining, the manufacture of gas, manufacturing by steam-railroad companies, nor the operations of the various navy-yards of the United States:



STATES AND TERRITORIES.	Number of establishments.	Capital.	AVERAGE NUMBER OF HANDS EMPLOYED.			Total amount paid in wages during the year.	Value of materials.	Value of products.
			Males above 16 years.	Females above 15 years.	Children and youths.			
Alabama.....	2,070	9,068,008	8,368	842	809	2,500,504	8,545,520	13,565,504
Arizona.....	66	272,600	216	2	2	111,150	980,023	815,965
Arkansas.....	1,202	2,958,130	4,307	90	160	925,358	4,392,080	6,756,159
California.....	6,885	61,248,784	38,311	3,922	1,460	21,065,905	72,607,709	116,213,973
Colorado.....	599	4,311,714	4,652	266	156	2,314,427	8,806,762	14,260,159
Connecticut.....	4,488	120,480,275	75,619	28,851	8,445	43,501,518	102,188,341	185,697,211
Dakota.....	251	771,428	854	8	6	389,375	1,523,761	2,373,970
Delaware.....	746	15,655,822	10,250	1,426	962	4,267,349	12,828,461	20,514,488
District of Columbia.....	971	5,552,526	5,496	1,859	261	3,924,612	5,365,400	11,882,316
Florida.....	426	8,210,680	4,564	558	382	1,270,875	8,040,119	5,546,448
Georgia.....	3,593	20,672,410	18,987	3,619	2,319	5,266,152	24,148,939	36,440,948
Idaho.....	162	677,215	374	8	6	186,826	844,874	1,271,371
Illinois.....	14,549	140,652,066	120,558	15,288	8,986	57,429,085	289,848,907	414,864,673
Indiana.....	11,198	65,742,962	62,072	3,615	3,821	21,960,888	100,262,917	148,006,411
Iowa.....	6,921	33,987,836	25,882	1,481	1,559	9,725,962	48,704,811	71,045,926
Kansas.....	2,803	11,192,315	11,189	892	591	3,965,010	21,553,141	30,543,777
Kentucky.....	5,328	45,613,089	30,949	3,529	2,913	11,667,844	47,461,890	75,483,377
Louisiana.....	1,553	11,462,468	10,171	1,395	661	4,360,371	14,442,606	24,205,138
Maine.....	4,481	49,938,171	35,431	13,777	8,746	18,628,318	51,120,708	79,829,798
Maryland.....	6,757	58,742,884	46,698	21,700	6,547	18,904,965	66,937,646	106,780,568
Massachusetts.....	14,352	803,806,185	228,884	105,976	17,445	128,315,362	386,672,655	631,185,284
Michigan.....	8,873	92,980,959	68,445	4,784	4,862	25,818,682	92,900,269	150,715,025
Minnesota.....	3,493	81,004,811	18,987	1,686	674	8,618,094	55,660,631	76,065,198
Mississippi.....	1,479	4,737,600	4,887	418	527	1,192,645	4,667,188	7,515,302
Missouri.....	8,592	72,507,544	54,200	5,474	4,321	24,309,716	110,798,892	165,886,205
Montana.....	196	899,390	574	8	1	818,759	1,006,442	1,836,867
Nebraska.....	1,408	4,881,150	4,464	120	209	1,742,311	8,208,478	12,627,386
Nevada.....	184	1,328,300	556	5	16	461,807	1,049,794	2,179,626
New Hampshire.....	3,181	51,112,268	29,356	16,184	3,291	14,814,798	43,552,462	73,978,028
New Jersey.....	7,128	106,226,593	86,787	27,099	12,152	46,068,045	165,285,479	254,880,286
New Mexico.....	144	468,275	558	.....	4	218,731	871,892	1,384,846
New York.....	42,739	574,246,575	364,549	137,455	29,529	198,694,029	679,612,545	1,090,696,586
North Carolina.....	3,502	13,045,639	12,818	2,939	2,352	2,740,768	18,090,937	20,095,087
Ohio.....	20,690	168,939,614	152,217	18,568	12,829	62,108,800	215,894,258	348,398,390
Oregon.....	1,080	6,312,056	3,280	96	97	1,667,046	6,954,466	10,081,282
Pennsylvania.....	31,232	474,510,993	284,359	78,048	29,667	184,055,904	465,020,563	744,818,445
Rhode Island.....	2,205	15,275,843	87,060	18,270	7,548	21,855,619	58,103,448	104,168,621
South Carolina.....	2,078	11,205,894	19,987	1,023	1,118	2,836,289	9,885,638	16,738,008
Tennessee.....	4,326	20,032,545	19,575	1,196	1,674	5,254,775	28,394,262	37,074,886
Texas.....	2,996	9,245,561	11,645	116	398	3,843,087	12,956,269	20,719,928
Utah.....	640	2,656,657	2,042	221	282	858,568	2,561,737	4,324,992
Vermont.....	2,874	23,265,224	14,438	2,271	881	5,164,479	18,880,477	31,254,366
Virginia.....	5,710	26,968,990	23,779	6,144	5,261	7,425,261	32,888,933	51,780,992
Washington.....	261	8,202,497	1,110	25	12	582,226	1,967,460	8,250,134
West Virginia.....	2,375	13,883,390	12,900	846	1,065	4,818,965	14,027,388	22,867,126
Wisconsin.....	7,674	73,821,502	48,255	6,241	2,613	18,814,917	85,796,178	128,255,480
Wyoming.....	57	864,673	380	.....	11	187,798	601,214	898,494
The United States.....	253,852	\$2,790,272,606	2,025,335	531,689	181,921	\$947,958,795	\$3,396,828,549	\$5,369,579,191

A comparison of the above totals for the United States with those returned by the census of 1870 shows the following:

	1870.	1880.
Number of establishments.....	252,148	253,852
Capital.....	\$2,118,208,769	\$2,790,272,606
Average number of hands employed:		
Males above 16 years.....	1,615,598	2,025,335
Females above 15 years.....	823,770	631,639
Children and youths.....	114,628	181,921
Total amount paid in wages during the year.....	\$775,584,343	\$947,958,795
Value of materials.....	\$2,488,427,242	\$3,396,828,549
Value of products.....	\$4,282,325,442	\$5,369,579,191

Gas, which is excluded from the returns of 1880, is included in those for 1870. The number of gas-works returned in 1870 was 390; capital invested, \$71,773,694; value of products, \$32,048,851. In all comparisons between values reported in 1870 and in 1880, it should be borne in mind that the values of 1870 were expressed in a currency which was at a great discount in gold. The average premium on gold during the twelve months—June 1, 1869,

to May 31, 1870—which constituted the census year, was almost exactly one fourth (25·3) per cent. A premium on gold of one fourth is equal to a discount on currency of one fifth. For purposes of comparison, therefore, the values of 1870 should be reduced in that ratio. It is a noteworthy fact that in the face of a large increase in the number of hands employed in manufactures, of the amount of material consumed, and of the value of products, the number of establishments shows hardly an appreciable gain from 1870 to 1880, notwithstanding an increase of 30 per cent in population. This is attributed by the census authorities to the well-known tendency to the concentration of labor and capital in large shops and factories. "The establishments of 1870," says the report, "showed eight as the average number of hands, and \$8,400 as the average amount of capital; those of 1880 showed 10·7 as the average number of hands, and \$10,992 as the average amount of capital. A good example of the effect of this cause is found in the coopers' trade, where, with a reduction in the

number of establishments from 4,961 to 8,898 (22 per cent nearly), the hands employed increased 11 per cent. But this increase in the average number of hands does not alone explain the decrease in the number of establishments. We have also to take into account the introduction of machinery into the furniture and cabinet-making industry, replacing much of the former work of the local carpenter in rural districts and small towns. We have then to consider the immense extension of the contract system of erecting buildings, the effect of which is to disconnect an increasing proportion of the working carpenters of every city or large town from actual shops and constitute them a

movable, readily disposable force, to be hired now by this contractor and now by that, according as jobs arise. We have, last, to consider the rapid substitution of brick and stone for wood in building, evidenced by the fact that the number of persons employed in the manufacture of brick in the United States has increased more than 50 per cent in ten years."

The following table gives the statistics of the leading manufacturing and mechanical industries in the United States. Returns of fishery products, gas-manufacture, petroleum-refining, mining, quarrying, and manufactures of establishments operated by steam-railroad companies are omitted.

INDUSTRIES.	No. of establishments.	Capital.	AVERAGE NUMBER OF HANDS EMPLOYED.					Total amount paid in wages during the year.	Value of materials.	Value of products.
			Males above 16 years.	Females above 16 years.	Children and youth.					
Agricultural implements.....	1,943	\$62,109,668	38,818	73	1,194		\$15,359,610	\$31,581,170	\$68,640,486	
Artificial feathers and flowers <sup>1</sup> .....	174	1,253,050	550	8,577	215		1,051,040	2,444,418	4,879,824	
Bags, other than paper.....	37	2,425,900	1,175	903	164		776,026	8,027,770	9,726,000	
Bags, paper.....	80	1,304,700	546	883	140		489,820	8,037,319	4,112,566	
Baking and yeast powders <sup>2</sup> .....	110	1,850,600	660	326	56		466,252	8,338,868	4,760,598	
Blacksmithing <sup>3</sup> .....	23,101	19,618,852	33,992	18	516		11,126,001	14,572,863	14,774,271	
Book-binding and blank-book making.....	588	5,798,671	5,127	4,881	654		3,927,349	5,195,771	11,976,764	
Boots and shoes <sup>4</sup> .....	17,972	54,353,804	104,021	25,946	2,852		50,995,144	114,966,575	196,920,481	
Boots and shoes, rubber.....	9	2,425,000	2,514	1,984	164		1,469,038	6,023,053	9,705,724	
Boxes, wooden, packing.....	602	5,304,212	6,611	405	706		2,769,135	7,674,921	12,687,068	
Brass and copper, rolled.....	28	9,057,600	4,105	673	304		2,524,169	9,523,157	14,829,781	
Brass castings.....	306	5,740,297	5,378	263	401		2,739,794	5,394,452	10,808,742	
Bread and other bakery products.....	6,896	19,155,286	18,925	1,200	1,853		9,411,325	42,613,027	65,824,896	
Brick and tile.....	5,631	27,673,616	59,082	268	7,055		18,448,532	9,774,894	32,898,587	
Brooms and brushes.....	980	4,186,897	5,798	1,765	1,260		2,424,040	5,694,555	10,560,555	
Carpentering.....	9,184	19,541,858	53,547	74	517		24,582,077	51,621,120	94,152,139	
Carpets, other than rag <sup>5</sup> .....	195	21,468,587	10,104	8,570	1,697		6,885,218	18,984,877	31,792,802	
Cars, railroad, street, and repairs <sup>6</sup> .....	130	9,272,680	13,885	18	334		5,507,753	19,750,271	27,997,591	
Carrriage and wagon materials.....	412	7,034,718	7,237	35	280		2,738,004	4,781,095	10,114,352	
Carrriages and wagons <sup>7</sup> .....	3,841	87,973,498	43,680	273	1,491		18,988,615	80,597,065	64,951,617	
Cheese and butter (factory).....	3,982	9,604,303	6,419	1,380	154		1,546,495	18,368,579	25,742,510	
Clocks.....	22	2,474,900	2,807	680	503		1,622,698	1,908,411	4,110,267	
Clothing, men's.....	6,166	79,861,696	77,255	83,994	2,504		45,940,353	181,368,238	299,543,460	
Clothing, women's.....	562	8,207,273	2,594	22,238	345		6,661,005	19,559,227	32,004,794	
Coffee and spices, roasted and ground.....	800	8,366,392	2,125	498	158		1,870,699	18,201,302	22,924,894	
Confectionery.....	1,450	8,480,874	6,157	2,827	817		3,242,552	17,125,775	25,687,038	
Copperage.....	3,808	12,178,726	24,435	42	1,996		8,992,608	18,441,061	38,714,770	
Cordage and twine.....	165	7,140,475	2,326	1,480	1,029		1,585,676	8,880,201	12,492,171	
Cotton goods <sup>8</sup> .....	1,005	219,504,794	64,107	91,148	30,217		45,614,419	113,765,587	210,985,388	
Cutlery and edge-tools <sup>9</sup> .....	420	9,850,355	9,458	850	681		4,447,349	4,682,222	11,661,370	
Dyes and chemicals <sup>10</sup> .....	592	28,598,458	8,144	1,138	263		4,157,163	24,880,566	38,178,658	
Dyeing and finishing <sup>11</sup> .....	191	26,223,981	12,788	2,038	1,272		6,474,364	18,664,295	32,297,420	
Fertilizers.....	364	17,913,660	14,677	75	146		2,648,422	15,505,078	28,650,795	
Flouring- and grist-mill products.....	24,393	177,361,878	58,239	42	126		17,422,816	441,545,225	505,185,712	
Foundry and machine-shop products.....	4,958	154,519,484	140,459	675	4,217		65,982,133	108,345,088	214,878,468	
Fruits and vegetables, canned and preserved.....	411	8,247,488	10,638	15,463	5,504		2,679,960	12,051,298	17,599,576	
Furnishing goods, men's.....	161	8,724,664	1,274	9,565	885		2,644,155	6,508,164	11,506,857	
Furniture <sup>12</sup> .....	4,843	38,669,764	45,180	917	2,620		20,888,794	81,410,763	68,087,905	
Furniture, chairs.....	384	6,276,364	7,532	1,301	1,442		3,811,286	4,448,498	9,807,823	
Furs, dressed.....	192	8,598,887	1,453	2,604	77		1,889,234	5,338,242	8,288,712	
Glass.....	211	19,844,699	17,778	741	5,658		9,144,100	8,028,621	21,154,571	
Gloves and mittens <sup>13</sup> .....	300	3,879,348	2,102	5,249	346		1,655,695	4,351,469	7,879,605	
Glucose.....	7	2,255,000	1,167	5	20		605,802	3,044,450	4,551,212	
Gold and silver, reduced and refined, not from the ore.....	23	817,100	299	...	5		178,696	9,128,811	9,548,183	
Grease and tallow.....	156	2,566,779	1,075	8	18		556,015	11,779,432	18,730,013	
Hardware.....	492	15,863,551	14,481	814	1,506		6,816,913	10,097,577	22,658,698	
Hardware, saddlery.....	64	1,655,550	2,167	321	327		960,432	1,851,436	3,651,021	
Hats and caps, not including wool hats.....	489	5,455,468	11,373	5,337	580		6,635,522	9,241,332	21,303,107	
Hosiery and knit goods <sup>14</sup> .....	859	15,579,591	7,517	17,707	8,661		6,701,475	15,210,951	29,167,227	
Iron and steel <sup>15</sup> .....	1,005	230,971,884	183,203	45	7,730		55,476,755	191,271,150	296,557,685	
Iron bolts, nuts, washers, and rivets.....	100	4,938,019	4,264	182	618		1,981,800	6,097,011	10,073,880	
Iron doors and shutters.....	6	79,875	211	...	12		103,269	296,000	496,060	
Iron forgings.....	91	8,598,241	2,977	95	183		1,329,151	3,960,730	6,492,028	
Iron nails and spikes, cut and wrought.....	64	8,877,805	2,011	519	880		1,255,171	8,312,632	5,629,210	
Iron pipe, wrought.....	35	6,129,565	4,909	13	288		1,758,258	9,480,049	13,292,162	
Iron railing, wrought.....	181	692,137	728	...	38		369,903	615,618	1,800,549	
Iron-work, architectural and ornamental.....	89	738,000	1,152	...	16		474,711	1,068,317	2,409,337	
Jewelry.....	739	11,431,164	10,650	1,998	689		6,441,688	10,324,390	22,901,621	
Lard, refined.....	20	2,513,066	1,080	46	105		546,238	21,648,826	23,195,702	
Leather, curried <sup>16</sup> .....	2,319	16,878,529	10,803	77	163		4,845,413	59,306,509	71,851,297	
Leather, dressed skins.....	202	6,266,237	4,966	208	221		2,441,372	11,063,265	15,399,211	



INDUSTRIES.	No. of establishments.	Capital.	AVERAGE NUMBER OF HANDS EMPLOYED.					Total amount paid in wages during the year.	Value of materials.	Value of products.
			Males above 16 years.	Females above 16 years.	Children and youth.					
Leather, tanned <sup>16</sup> .....	3,105	50,222,054	23,287	188	387	9,204,248	85,949,207	118,848,886		
Liquors, distilled.....	844	24,247,595	6,452	10	40	2,669,967	27,744,245	41,068,603		
Liquors, malt.....	2,191	91,208,224	26,001	29	190	12,198,058	56,886,500	101,058,885		
Liquors, vinous.....	117	2,581,910	781	57	129	216,559	1,840,629	2,169,193		
Lithographing <sup>17</sup> .....	167	4,501,825	3,641	308	373	2,307,002	2,755,264	6,912,338		
Lumber, planed <sup>18</sup> .....	1,203	17,612,923	14,614	23	652	5,890,724	24,477,543	86,808,258		
Lumber, sawed.....	25,708	181,186,122	141,564	425	5,967	81,845,974	146,155,885	283,268,729		
Malt.....	216	14,890,441	2,320	8	4	1,004,548	14,821,428	18,379,162		
Marble and stone work.....	2,846	16,498,221	21,112	23	896	10,238,386	12,743,345	31,415,150		
Masonry, brick and stone.....	1,591	3,990,706	15,877	1	142	6,880,800	10,123,478	20,586,558		
Matches.....	37	2,114,850	808	1,120	231	585,911	2,898,502	4,668,440		
Mattresses and spring beds.....	357	1,749,750	1,770	466	158	808,325	8,116,471	5,288,284		
Millinery and lace goods <sup>19</sup> .....	247	2,678,880	971	5,248	386	1,661,044	6,142,091	9,577,840		
Mixed textiles <sup>20</sup> .....	470	37,996,057	17,470	20,520	5,882	18,316,753	37,227,741	66,221,708		
Musical instruments, organs, and materials.....	171	8,922,338	3,948	89	165	2,142,598	2,692,832	6,136,472		
Musical instruments, pianos, and materials.....	174	9,809,577	6,449	57	69	4,608,193	5,283,119	12,264,521		
Oil, cotton-seed and cake.....	45	3,862,300	3,114	38	172	880,836	5,091,251	7,690,921		
Oil, lard.....	28	1,127,500	424	...	8	161,672	4,184,450	4,721,066		
Oil, linseed.....	81	5,872,750	1,375	17	21	651,677	12,874,294	15,898,812		
Oleomargarine.....	15	1,680,300	561	18	20	212,992	5,486,141	6,892,989		
Painting and paper-hanging.....	3,968	5,645,950	17,271	131	309	7,920,866	8,762,780	22,457,560		
Paints <sup>21</sup> .....	244	13,555,292	4,192	188	103	2,182,255	17,062,552	28,890,767		
Paper, not specified.....	692	46,241,202	16,138	7,640	649	8,526,355	33,951,297	55,109,914		
Paper-hangings.....	25	8,560,500	1,666	150	671	874,921	8,629,222	6,267,308		
Patent medicines and compounds.....	563	10,620,580	2,504	1,186	335	1,651,566	6,704,729	14,682,494		
Plated and britannia ware.....	55	5,362,025	3,742	831	102	2,453,301	4,100,116	8,596,181		
Plumbing and gas-fitting.....	2,161	9,950,512	9,217	15	452	4,770,359	9,095,808	18,128,250		
Printing and publishing <sup>22</sup> .....	8,467	62,933,704	45,580	6,759	5,839	30,681,687	32,840,395	90,789,841		
Rubber and elastic goods.....	90	6,057,987	3,698	2,281	294	2,295,972	9,249,967	18,751,724		
Saddlery and harness.....	7,999	16,508,019	20,024	561	861	7,997,732	19,968,710	38,081,648		
Salt.....	268	8,225,740	4,125	20	144	1,260,028	2,074,049	4,829,566		
Sash, doors, and blinds <sup>23</sup> .....	1,288	20,457,670	20,544	79	1,275	8,540,980	20,789,199	36,621,825		
Sewing-machines and attachments.....	106	12,501,880	8,682	248	673	4,636,069	4,829,106	18,663,188		
Sewing-machine cases.....	18	741,800	1,586	...	286	688,388	1,289,400	2,064,887		
Ship-building <sup>24</sup> .....	2,183	20,979,874	21,868	...	7	12,718,818	19,736,858	36,800,827		
Shirts.....	549	6,541,778	2,878	22,186	628	5,408,096	11,806,444	20,180,081		
Shoddy.....	73	1,165,100	695	496	91	400,826	8,366,650	4,989,615		
Silk and silk goods.....	832	19,125,800	9,375	16,896	5,566	9,146,705	22,467,701	41,083,465		
Slaughtering and meat-packing <sup>25</sup> .....	872	49,419,213	26,118	...	1,184	10,508,530	267,788,902	803,562,418		
Soap and candles.....	639	14,541,294	4,368	388	538	2,219,513	19,907,444	26,552,627		
Starch.....	139	5,328,256	2,710	801	108	919,197	4,911,060	7,477,742		
Stone- and earthen-ware.....	680	6,380,610	7,295	94	1,941	3,279,535	2,564,359	7,942,729		
Straw goods.....	77	3,338,500	3,278	7,801	169	2,556,197	4,455,559	9,345,759		
Sugar and molasses, refined.....	49	27,482,500	5,832	...	25	2,875,032	144,698,499	155,484,915		
Tar and turpentine <sup>26</sup> .....	508	1,866,390	9,555	885	242	1,629,061	2,324,637	5,576,988		
Tin, copper, and sheet-iron ware.....	7,595	22,252,290	29,008	858	1,492	10,729,974	25,232,251	48,096,088		
Tobacco, chewing, smoking, and snuff.....	477	17,207,401	14,886	10,776	7,094	6,419,094	84,397,072	52,792,056		
Tobacco, cigars, and cigarettes.....	7,145	21,698,549	40,099	9,108	4,090	18,464,562	29,577,888	63,978,575		
Tools <sup>27</sup> .....	145	4,384,109	8,042	29	80	1,489,581	1,532,556	4,226,565		
Upholstering <sup>28</sup> .....	781	2,885,401	2,456	680	212	1,358,384	4,150,884	7,158,868		
Varnish <sup>29</sup> .....	81	8,778,100	550	...	23	866,716	8,699,684	5,721,174		
Watch-cases.....	27	1,584,740	1,418	189	201	976,041	2,812,922	4,589,814		
Watches.....	11	4,144,327	2,127	1,219	...	1,712,276	982,224	8,271,244		
Wheelwrighting <sup>30</sup> .....	10,701	10,641,080	15,821	17	270	6,074,799	6,703,677	18,892,858		
Wire.....	40	4,290,071	5,544	172	453	1,982,731	7,084,065	10,836,065		
Wire-work.....	805	3,681,598	3,595	900	564	1,708,165	5,410,084	9,127,818		
Wood turned and carved <sup>31</sup> .....	710	3,450,110	4,938	181	601	2,148,914	2,940,680	6,770,119		
Wooden-ware.....	287	3,606,794	4,268	144	621	1,589,571	2,685,720	5,233,474		
Wool hats.....	43	3,615,830	3,222	1,459	789	1,596,215	4,735,774	8,516,569		
Woolen goods <sup>32</sup> .....	1,990	96,095,644	46,978	29,872	10,154	25,836,392	100,845,611	160,606,721		
Worsted goods.....	76	20,374,043	4,625	3,473	2,895	5,682,027	22,018,628	38,549,942		

<sup>1</sup> See also Millinery and lace goods.<sup>2</sup> See also Wheelwrighting.<sup>3</sup> See also Woolen goods.<sup>4</sup> See also Woolen goods.<sup>5</sup> Not including statistics of establishments operated by steam-railroad companies.<sup>6</sup> See also Wheelwrighting.<sup>7</sup> See also Tools.<sup>8</sup> Including independent dye-works, bleacheries, and print-works, but not establishments connected with cotton, woolen, or silk factories. The values of the products reported are merely the values added to the fabrics by the processes of these establishments, values of the unfinished goods not being included in "Value of materials," nor the values of the finished goods in "Value of products."<sup>9</sup> See also Hosiery and knit goods.<sup>10</sup> Including blast-furnaces, blast-maries and forges, rolling-mills, and steel-works of all kinds.<sup>11</sup> In the statistics of Leather carried and of Leather tanned, establishments engaged in both branches of the industry are duplicated in the returns of "Number of establishments."<sup>12</sup> See also Printing and publishing.<sup>13</sup> See also Artificial feathers and flowers.<sup>14</sup> See also Cotton goods; Woolen goods.<sup>15</sup> See also Cotton goods; Silk; Woolen goods.<sup>16</sup> See also Lithographing.<sup>17</sup> Not including operations of United States navy-yards.<sup>18</sup> Not including retail butchering establishments.<sup>19</sup> See also Furniture.<sup>20</sup> See also Blacksmithing; Carriages and wagons.<sup>21</sup> See also Paints.<sup>22</sup> See also Lumber, planed.<sup>23</sup> See also Lumber, planed.<sup>24</sup> See also Lumber, planed.<sup>25</sup> See also Lumber, planed.<sup>26</sup> See also Lumber, planed.<sup>27</sup> See also Lumber, planed.<sup>28</sup> See also Lumber, planed.<sup>29</sup> See also Lumber, planed.<sup>30</sup> See also Lumber, planed.

The census statistics of cotton manufactures include first specific cotton goods and second the products of special mills. The former comprise those establishments which manufacture cotton into a fabric known and sold under that name. The classification includes spinning-spindles making yarn for mixed goods, and spindles appurtenant to looms on which cotton is woven into cotton cloth. It excludes nearly but not quite all hosiery-mills, and all mills known as woolen-mills, even though cotton may be the component material of chief value in the fabrics made in them. The returns of specific cotton manufactures for the United States, and also for New England, the chief seat of the industry, are:

CLASSES.	United States.	New England.
Number of establishments.....	756	499
Capital invested.....	\$208,280,346	\$156,754,690
Number of spindles.....	10,653,435	8,632,087
Number of looms.....	225,759	184,701
Operatives:		
Men.....	59,685	45,521
Women.....	84,539	62,554
Boys under fifteen.....	15,107	10,051
Girls under sixteen.....	18,213	7,653
Total.....	172,544	125,781
Cotton consumed, bales.....	1,570,844	1,129,438
Cotton consumed, pounds.....	750,343,951	541,373,880
Cost of cotton.....	\$36,945,725	\$63,169,434
Goods made, pounds.....	607,264,241	432,744,610
Goods made, yards.....	2,273,278,025	1,513,478,967
Wages paid operatives.....	\$42,040,510	\$32,170,861
Value of materials.....	102,206,348	74,290,026
Value of products.....	192,090,110	143,868,080

In New York, New Jersey, Pennsylvania, Delaware, and Maryland there were 139 mills, with 1,391,164 spindles and 27,318 looms, and an invested capital of \$31,014,759. The mills in these States consumed in the census year 228,729 bales of cotton, and made products valued at \$29,389,286. In the Southern States there were 161 mills, with 542,048 spindles and 11,898 looms. They had 16,317 hands employed, used 182,349 bales of cotton, and turned out goods valued at \$16,356,598.

The statistics of special manufactures include the products of special mills working raw cot-

ton, waste, or cotton yarn into hose, webbing, tapes, fancy fabrics or mixed goods, or other fabrics which are not sold as specific manufactures of either cotton or wool. Some mills work both fibers, but are more properly to be considered as manufactories of cotton than of wool.

The number of special mills returned in the United States was 249. They had 60,242 spindles and 4,025 looms; employed 12,928 operatives, who received \$3,573,909 in wages; consumed 40,597 bales of cotton; and made products valued at \$18,860,273, with an invested capital of \$11,224,448. Including both of the above-named branches of this industry, the aggregate statistics of cotton manufacture are: number of establishments, 1,005; capital invested, \$219,504,794; hands employed, 185,472; wages paid during the year, \$45,614,419; value of materials, \$113,765,537; value of products, \$210,950,383.

Mr. Edward Atkinson, the special agent, concludes his report on specific cotton manufactures in these words: "When it is remembered that a larger portion of the population of the globe is now clothed in cotton fabrics made by hand, and that even those who use machine-made fabrics are served as yet with less than half as much cloth as the people of this country average in each year, the future field for industry and commerce in this department may be imagined, but can not be proved by statistics, or by any deductions from census data."

The statistics of manufactures from wool in the United States during the year ended May 31, 1880, are given in the following table. With hosiery and knit goods are here included woolen, cotton, and mixed hosiery, and woolen, cotton, and mixed knit goods.

Of the 1,990 establishments manufacturing woolen goods, reported below, 570 were only carding-mills; 233 others used not over 5,000 pounds of wool each, and 158 used from 5,000 to 10,000 pounds of wool each:

CLASSES.	All classes of manufactures from wool.	Woolen goods.*	Carpets other than rag.	Felt goods.	Worsted goods.	Wool hats.	Hosiery and knit goods.
Number of establishments.....	2,684	1,990	195	26	76	43	854
Capital.....	\$159,644,270	\$96,095,564	\$21,468,587	\$1,958,255	\$20,874,048	\$3,615,830	\$15,133,991
Hands employed:							
Total number.....	163,993	86,502	20,371	1,524	18,803	5,470	28,328
Number of males over sixteen.....	75,334	46,975	10,104	1,203	6,485	3,222	7,395
Number of females over fifteen.....	66,505	29,373	8,570	293	9,478	1,459	17,397
Number of youth.....	19,159	10,154	1,697	88	2,895	789	8,536
Amount paid in wages.....	\$47,180,618	\$25,836,392	\$6,818,218	\$419,750	\$5,638,027	\$1,898,215	\$6,530,416
Wool consumed:							
Weight as received at mill:							
Foreign, pounds.....	73,200,698	20,482,667	34,008,252	700,067	15,637,815	1,864,189	448,738
Domestic, pounds.....	222,991,531	177,042,288	2,029,318	4,204,806	25,461,511	6,107,471	8,146,137
Weight after scouring for cards, pounds	171,880,531	109,724,213	23,563,216	2,793,736	20,384,635	3,597,279	5,927,692
Value.....	\$97,681,604	\$67,890,250	\$6,975,129	\$1,624,871	\$15,235,678	\$2,644,293	\$3,821,163
Value of all materials.....	164,114,799	100,345,611	18,984,877	2,530,710	22,013,628	4,755,774	14,954,199
Value of products.....	267,699,504	160,606,721	31,792,802	3,619,653	33,549,942	8,516,569	23,613,727

(For detailed statistics of silk manufactures,

and also of iron and steel, see article on UNITED STATES, in "Annual Cyclopædia" for 1881.)

The manufactures of twenty principal cities were reported as follows by the census of 1880:

\* Under "woolen goods" are included blankets, cloths, cassimeres, do-skins, heavers, overcoatings, diagonals, flannels, jeans, kerseys, linseys, repellents, satinetts, tweeds, shawls, woolen yarn, etc., and woolen rolls.



CITIES.	No. of establishments.	Capital.	AVERAGE NUMBER OF HANDS EMPLOYED.			Total amount paid in wages during the year.	Materials.	Products.
			Males above sixteen years.	Females above fifteen years.	Children and youths.			
Baltimore.....	3,683	\$38,586,773	84,086	18,187	4,115	\$15,117,489	\$47,974,297	\$78,417,804
Boston.....	3,665	47,848,384	89,810	18,150	1,283	24,924,009	81,688,160	180,551,995
Brooklyn.....	5,201	61,646,749	87,105	7,029	3,402	22,487,457	129,085,091	177,228,143
Buffalo.....	1,183	26,847,937	18,093	1,705	1,193	7,442,109	27,552,082	42,087,702
Chicago.....	3,519	68,836,885	62,481	12,185	4,798	24,653,402	179,209,610	249,029,941
Cincinnati.....	3,276	50,538,100	88,993	10,483	5,041	19,558,629	62,876,710	105,289,168
Cleveland.....	1,055	19,430,989	18,018	2,286	1,420	8,502,935	31,629,737	48,604,055
Detroit.....	919	10,594,479	12,477	2,480	1,203	6,306,460	18,150,995	30,151,410
Jersey City.....	564	11,899,915	7,962	2,426	750	4,622,655	49,788,985	60,478,906
Louisville.....	1,108	21,767,018	18,480	2,829	1,189	5,885,545	21,207,110	35,428,208
Milwaukee.....	844	18,766,914	16,015	3,922	949	6,946,105	28,975,872	48,473,512
Newark.....	1,819	25,679,885	22,151	5,246	2,649	18,171,839	44,604,835	69,252,705
New Orleans.....	915	8,565,303	7,666	1,286	552	8,717,557	10,771,892	18,808,096
New York.....	11,389	181,206,856	146,179	71,795	9,873	97,080,021	288,441,691	472,926,437
Philadelphia.....	8,567	187,148,857	118,075	56,818	15,084	64,265,966	199,155,477	324,342,935
Pittsburg.....	1,112	52,645,010	32,011	1,681	3,288	17,168,989	42,109,777	75,915,088
Providence.....	1,203	27,177,006	16,050	5,125	1,716	9,454,110	22,794,227	42,597,512
St. Louis.....	2,924	50,832,885	39,980	4,761	3,084	17,743,532	75,879,867	114,883,375
San Francisco.....	2,971	35,368,139	23,062	8,588	1,192	14,328,384	47,873,072	77,824,239
Washington.....	971	5,552,526	6,496	1,859	261	3,924,612	5,865,400	11,882,316

During the course of the year, a prominent journal questioned the accuracy of the above statistics, and, in support of its criticisms, pointed out that the average annual product (gross) per hand employed was only \$1,752 in Philadelphia, while it was \$2,054 in New York, \$3,106 in Chicago, \$3,751 in Brooklyn, and \$5,574 in Jersey City. In a letter to the Superintendent of the Census, dated December 3, 1882, and published as census bulletin No. 305, ex-Superintendent Francis A. Walker explains that there are industries of gigantic dimensions in which the value of the materials used reaches 80, 90, and even 94 per cent of the value of the product, and that it is the prosecution of these industries in three of the cities above named which accounts for the seemingly disproportionate returns thence made of the value of manufactured products. Thus, in Jersey City, nearly 70 per cent of the entire value of products reported consists of the value of packed meats and of refined sugar and molasses, the cost of the raw materials being 92 per cent. Deducting the value of raw materials, the result is an average annual product per hand employed, of but \$960. Of the total reported product of Brooklyn, more than a third is furnished by a single industry—sugar-refining—of which Brooklyn is the chief seat in this country. Of the \$59,711,168 worth of refined sugar and molasses returned, the cost of the raw sugar and molasses was \$56,423,868. Deduct the value of materials used in the manufactures of Brooklyn, and the average annual product per hand employed sinks to \$991. Of the productions of Chicago, over one third in value—\$85,324,371—is furnished by the meat-packing industry, the stock-yards and slaughter-houses of that city being without a parallel in the world. Of this enormous aggregate, seven eighths is made up of the value of cattle and hogs slaughtered. Deduct the value of materials consumed in the manufactures of Chicago, and the result is an annual average product per hand of but \$861. By a like deduction of the value of materials in the

case of New York, an average annual product per hand of only \$794 is obtained. The same bulletin contains the following instructive table, prepared by General Walker. The first column shows the rank of the city named, upon the list of twenty cities, in the respect of the aggregate number of persons employed in manufacturing establishments; the second, in the respect of the aggregate amount of wages paid in manufactures; the third, in the respect of the aggregate gross product of all branches of manufactures; the fourth, in the respect of the average annual product per hand employed, after deduction of the value of materials:

CITIES.	HANDS EMPLOYED AND WAGES.		PRODUCT.	
	No. of hands.	Amount of wages.	Aggregate gross product.	Average net product.
New York.....	1	1	1	14
Philadelphia.....	2	2	2	18
Chicago.....	3	3	3	7
Brooklyn.....	7	5	4	2
Boston.....	4	4	5	11
St. Louis.....	8	8	6	4
Cincinnati.....	6	6	7	16
Baltimore.....	5	9	8	20
Pittsburg.....	9	7	9	5
San Francisco.....	11	10	10	1
Newark.....	10	11	11	12
Jersey City.....	18	18	12	3
Cleveland.....	12	13	13	15
Buffalo.....	15	14	14	9
Providence.....	13	12	15	8
Milwaukee.....	14	15	16	19
Louisville.....	16	17	17	13
Detroit.....	17	16	18	17
New Orleans.....	19	20	19	10
Washington.....	20	19	20	6

"A most striking feature of this table," says Mr. Walker, "is the tendency on the part of the greatest manufacturing cities, as a class, to show a smaller average annual product per hand employed (column 4) than the less important manufacturing cities as a class. The reason is perfectly evident. Where manufacturing capital is accumulated in vast amounts; where production is carried on upon the largest scale, with the most approved appliances, and with most direct access to the greatest markets,

there is found, other things equal, the power of producing at the lowest cost.

"Let us see how this is borne out by the foregoing table:

"First, take individual instances. New York, which is first in gross aggregate production, as it is also first in the number of hands employed and aggregate amount of wages paid, falls to fourteenth in respect to average annual product per hand employed. Philadelphia, which is second in the three respects first indicated, falls to eighteenth. Chicago, which ranks third in each of the three respects first indicated, falls to seventh in the last respect, moving in the same direction, though not so far as either New York or Philadelphia, probably because of the higher rate of interest and the greater risk to capital in a newer city. Boston, which is fifth in aggregate gross product, becomes eleventh in average annual product per hand employed; Baltimore falls from eighth to twentieth; Cincinnati, from seventh to sixteenth, etc.

"On the other hand, San Francisco, the single large city of its coast, with markets all its own, is only tenth in aggregate gross product, but becomes first in what we may call individual product, i. e., average annual product per hand employed; Washington, which can hardly be called a manufacturing city, doing little more than to supply its own market, rises from twentieth (column 3) to sixth (column 4); New Orleans, with manufactures aggregating only about eighteen millions, rises from nineteenth to tenth; Jersey City, whose manufactures, exclusive of meat-packing and sugar-refining, scarcely exceed eighteen millions, rises from twelfth to third, etc.

"There are some apparent exceptions to this rule, such as Brooklyn, St. Louis, Pittsburg, and Providence, which, while large and prosperous manufacturing cities, move, though but slightly, in the direction of a higher relative rank in column 4 than in column 3; yet, if we name the cities which change more than one point in either direction, it will at once appear that the great weight of manufacturing power is on the side of those which stand relatively higher in respect to aggregate gross production than on the side of those which reverse the relation.

"1. Those cities which stand higher in column 3 than in column 4, by more than one point, are New York, Philadelphia, Chicago, Boston, Cincinnati, Baltimore, Cleveland, and Milwaukee.

"2. Those cities which stand higher in column 4 than in column 3, by more than one point, are Brooklyn, St. Louis, Pittsburg, San Francisco, Jersey City, Buffalo, Providence, Louisville, New Orleans, Washington.

"The aggregate manufacturing production of the first class of cities is considerably more than twice that of the second.

"Were we to limit our enumeration to those cities which change more than two points, we

should lose from the former list only Cleveland, while we should lose from the latter list the two cities which constitute by far its most important members, Brooklyn and St. Louis. The former class would then show an aggregate manufacturing product of nearly four times the latter."

MARSH, GEORGE PERKINS, LL. D., an American diplomatist and author, born in Woodstock, Vt., March 15, 1801; died suddenly in Vallambrosa, Italy, July 24, 1832. Having received a proper preparatory training, young Marsh entered Dartmouth College, and graduated with honor in 1820. He then studied law at Burlington, Vt., was admitted to the bar, and speedily obtained large practice. He was also active in political affairs, and in 1835 was elected a member of the Legislature of his native State. In 1842 he became a member of Congress, and remained such for seven years. In 1849 President Taylor appointed him United States Minister to Turkey, a position which he filled to the entire satisfaction of the Government, and the best interests of the country and people to which he was accredited. While in Turkey he was charged (in 1852) with a special and important mission to Greece. Returning home, in December, 1853, he served as Commissioner of Railroads for Vermont. In March, 1861, Mr. Marsh was appointed by President Lincoln Envoy Extraordinary and Minister Plenipotentiary to Italy, a post which he well and worthily occupied for the remaining twenty-one years of his life, ever watchful of the interests of his own country, and honored and esteemed by the Government and people of Italy.

In addition to his public duties, Mr. Marsh also served the cause of good letters by preparing and publishing a number of useful works; viz.: "A Compendious Grammar of the Old Northern or Icelandic Language," compiled and translated from the grammar of Rask (1838); "The Camel, his Organization, Habits, and Uses, considered with Reference to his Introduction into the United States" (1856); "Lectures on the English Language" (1861); "Origin and History of the English Language, and of the Early Literature it embodies" (1862); "Man and Nature" (1864), subsequently revised and improved, and published under the title "The Earth as modified by Human Action" (1874). The degree of LL. D. was conferred upon him by his *Alma Mater* in 1860. He also published at different times a number of lectures, speeches, and addresses, which evidence his zeal and activity in good works.

MARYLAND. State officers: Governor, William T. Hamilton; Treasurer, Barnes Compton; Comptroller, Thomas J. Keating; Attorney-General, C. J. M. Gwinn; Warden of the Penitentiary, J. W. Horn; State Superintendent of Public Schools, M. A. Newell; President of the Chesapeake and Ohio Canal, Lewis Cass Smith (elected in August to succeed Arthur P. Gorman, resigned); State Tax Com-



missioner, L. Woolford. United States Senators, Arthur P. Gorman and J. B. Groome.

Members of the Forty-seventh Congress: First District, G. W. Covington, Democrat; Second District, J. F. C. Talbott, Democrat; Third District, F. S. Hoblitzell, Democrat; Fourth District, R. M. McLane, Democrat; Fifth District, A. G. Chapman, Democrat; Sixth District, M. G. Urner, Republican.

Members-elect of the Forty-eighth Congress: First District, G. W. Covington, Democrat; Second District, J. F. C. Talbott, Democrat; Third District, F. S. Hoblitzell, Democrat; Fourth District, J. V. L. Findlay, Democrat; Fifth District, Hart B. Holton, Republican; Sixth District, Louis E. McComas, Republican.

FINANCES.—The receipts into the Treasury during the fiscal year ending September 30th were \$1,924,481.47, being \$72,159.61 less than those of 1881. The State debt is \$11,269,031.78, of which \$401,529.18 have been, in fact, paid in advance and deposited in the sinking funds, leaving the outstanding debt \$10,867,502.60. The interest of the State in works of internal improvement is held for, and when sold is applied to, the payment of this debt. The value of these works, in the opinion of the Comptroller of the Treasury, is at any time fully adequate to pay the entire debt. The declared policy of the Legislature of Maryland is to reserve her securities, and to fund her debt, as it falls due, at a lower rate of interest. Under the "Defense Redemption Loan" act of this year, the defense loan of 1868, amounting to \$3,000,000, bearing 6 per cent interest, falling due in January, 1884, will be converted early in the next year at par into the new loan at 3'65 per cent interest. The total revenues of the State for the fiscal year were \$1,924,481.47, which, together with the balance in the Treasury, September 30, 1881, of \$752,198.29, make a total amounting to \$2,676,679.76. While the actual value of property of every description throughout the State has increased largely since the assessment of 1877, there has been a decrease in the assessed value of property upon which the direct tax is levied, owing, says the Comptroller, to "the notorious fact that everybody whose taxable wealth decreases demands an abatement from the tax court, and everybody whose wealth increases avoids a reassessment. . . . Not until every person holding property," continues the Comptroller, "shall be required to go once a year to the assessor to be taxed according to his actual worth, will taxation be equalized and its burdens be imposed so as to fall lightly on the many rather than heavily on the few." The State levy for 1882, at the rate of 18½ cents on the \$100, was \$871,546.59, of which only \$490,923.79 were paid into the Treasury, leaving \$380,622.80 uncollected. The amount due by collectors of previous years, exclusive of interest, is \$545,964.83, which, with the sum uncollected from this year's tax levy, makes an aggregate of \$926,587.63, demonstrating the necessity for the

adoption of an improved plan for the collection of the taxes of the State. The receipts of taxes from incorporated institutions were \$63,336.41, leaving due and unpaid \$108,125.83, steps for the enforcement of the payment of which have been taken. The receipts from licenses and taxes of foreign insurance companies were \$49,442.24. The gross receipts of the tobacco-warehouses were \$72,070.53, and the net earnings were \$3,667.10—a sum insufficient to pay the salaries (\$1,800 each) of the tobacco inspectors. The receipts on account of the oyster fund were \$57,751.05, the expenses chargeable to which were \$39,070.59. The total capital and credits of the State on September 30, 1882, amounted to \$31,475,338.85, of which \$4,960,293.27 are classed as "productive," and \$26,515,045.58 as "unproductive," that is, in arrears or worthless. The total disbursements for the year were \$2,038,173.13, leaving a balance in the Treasury at the close of the fiscal year of \$638,506.63. The State holds the following bonds and stocks, on which interest or dividends are promptly paid:

Stock of the Baltimore and Ohio Railroad Company.....	\$968,615 70
Stock in Washington branch, Baltimore and Ohio Railroad Company.....	550,000 00
Stock in Farmers' National Bank of Annapolis.....	46,470 00
Stock in Annapolis Water Company.....	30,000 00
Bonds of Baltimore and Ohio Railroad Company.....	366,000 00
Bonds of Northern Central Railroad (mortgage).....	1,500,000 00
Bonds to credit of sinking funds.....	401,529 18
Cash to credit of sinking funds.....	495 46
	<b>\$3,863,110 34</b>

The dividends and interest on these securities amounted this year to \$230,978.85.

STATE LEGISLATURE.—The General Assembly of Maryland met in the beginning of January. The chief subjects of proposed legislation were a law for the registration of voters, and laws to secure "a free ballot and a fair count"; an improved system of taxation; laws for the more effective protection of the oyster-beds of the Chesapeake against spoliation; a revision of the statutes relating to the inspection of tobacco, and several matters relating to the city of Baltimore, including propositions for the reorganization of the Board of Police Commissioners, an extension of the city limits, and a reduction of the passenger fare on the city railroads. Great interest was felt in the proposed revision of the tobacco-inspection laws. Tobacco-growing is one of Maryland's most important industries, and one which might be largely increased, say the planters, were the inspection laws less oppressive than they have been hitherto. Their chief objection has been to what is called the "compulsory clause" of the inspection law, by which, under a penalty of \$500 for each infraction, the planter was compelled to pack his tobacco in packages of prescribed dimensions, containing not less than 600 pounds, and ship for inspection to one of the State warehouses in Baltimore. The regulation as to the size of the package was peculiarly objectionable to the small planter. While an acre of land will produce as a rule an aver-

age of one hoghead, it will produce several grades of tobacco, and the planter who only cultivates one or two acres was compelled to mix the various grades, thus injuring the sale of the best, without getting any higher price for the inferior grades. The Legislature has repealed this compulsory clause. The planter may now send his tobacco where he pleases, but the inducement of free storage is offered him to come to the State warehouses, which are managed by five inspectors appointed every two years by the Governor, who are required to give bond in the sum of \$30,000, and are prohibited from having any interest in the buying or selling any tobacco except of their own growth. The bill reducing the fare on the city railroads of Baltimore to five cents, and requiring the car-companies to pay 9 per cent of their gross earnings as a park-tax, was also passed. Among other facts elicited in the discussion of this measure was the following statement of the condition of these car companies:

Revenue of the city passenger railroad companies, \$651,651 10  
Loss of revenue by reduction of fares to five cents. 116,948 27

Estimated expenses, based on average for five years ..... \$584,707 83  
..... 364,790 15

Park-tax.....\$64,164 84  
Other taxes..... 20,000 00  
..... 84,164 84

Net revenue for dividend..... \$85,753 84

This net revenue for dividend exceeds by \$5,000, 8 per cent on the nominal capital stock, which is \$1,000,000, of which only half is paid in, making it really a dividend of 16 per cent on the actual investment. Efforts were made to curtail the appointing power of the Governor, and to defeat many of his appointments, which were only partially successful. Measures were passed for the more perfect registration of voters, for securing fair elections, and an excellent bill punishing owners of gambling-tables with fine and imprisonment; and a bill authorizing the city of Baltimore to contract a loan of \$5,000,000 for the purpose of constructing a sewerage system, was also passed. The Legislature adjourned by constitutional limitation on April 3d. Owing to the illness of the Governor at the time of adjournment, and to the subsequent illness of Mr. Keilholtz, Speaker of the House of Delegates, considerable delay and difficulty arose as to signing a large number of bills passed before the close of the session. The question as to the legality of these acts signed more than ten days after the adjournment has been raised, and will be tested in the Court of Appeals.

The protection of the oyster-beds of the Chesapeake Bay against the depredations of home and foreign dredgers is regarded as a necessity, or the oyster-fisheries will soon become a thing of the past. While there is reason to believe that the evils complained of are not as great as they are represented, it is true that the average yield for several years past

has been gradually decreasing. It seems to be universally admitted that the existing laws for the protection of the oyster-fisheries are inadequate, and that the means employed to enforce them are wholly inefficient. Arbitrary and invisible lines are drawn between shore-points, on one side of which is the forbidden ground for dredgers. Occasionally a poaching dredger passes the line and is caught by the oyster-police, but most of the trespassers escape. In the exceptional case of a capture, the captain and crew are sent to the county town. The latter, who have been obliged to obey their captain's orders, are put in jail, the skipper gives bail and goes free, the owners of the vessel pay the fine, and thus the captain, who is presumed to know the forbidden from the free waters, receives no punishment, although he is the really guilty party. The greatest injury to the oyster-beds is done by the men from Delaware Bay, New York, and Long Island Sound, who come into the Chesapeake in the spawning-season and catch oysters for the purpose of transplanting them. They do not pretend to cull the oysters, but sail away as soon as they have scooped up a load, each one of their stolen oysters representing a dead loss of as many as its spat would have produced. These thefts have been perpetrated annually for several years, and in April and May of this year were more extensive than in any previous year. Governor Hamilton has appointed a commission, consisting of Professor Brooks and Messrs. Waddell and Legg, all competent men, to report to the next General Assembly suitable measures for the adequate protection of the oyster-beds.

In March the miners of the Cumberland coal region, at the instigation of the Knights of Labor, struck for higher wages and other regulations as to time and quantity of work. They demanded sixty cents per ton, and that no miner should be required to dig more than five tons per day. The coal companies refused to comply with these terms, alleging that they could not pay the price demanded and mine coal at any profit. After many months of suffering—from March to the end of August—the miners were compelled to yield and asked to be allowed to go back to work at the price fixed by the companies. Some were re-employed, but many failed to get work, as the companies had filled their places. The companies refused to accede to the regulation giving only five tons per day to each man, on the apparently just ground that it requires them to employ a greater number of men than is necessary. In one or two cases the strikers refused to work unless the entire old force were re-employed.

The following are the total shipments for the year, as made by each company:

COMPANIES.	Tons, Cwt.
American Coal Company.....	88,860 16
Blaen Avon Coal Company.....	7,012 18
Borden Mining Company.....	87,984 01
Buffalo Valley Pennsylvania Company.....	2,282 11
Consolidation Coal Company.....	97,911 03



COMPANIES.	Tons. Cwt.
Cumberland and Elk Lick Coal Company.....	3,969 17
Despard Coal Company.....	1,501 11
Gaston Coal Company.....	4,001 15
George's Creek Coal and Iron Company.....	14,654 10
Individuals.....	17,550 07
Keystone Coal Company.....	404 19
Maryland Coal Company.....	38,287 06
National Coal Company.....	8,805 09
New Central Coal Company.....	33,604 19
Piedmont Coal and Iron Company.....	3,673 01
West Virginia Central and Pittsburg Railway Company.....	12,213 02
	316,643 07

The long-disputed boundary question between the States of Maryland and Virginia was considered in February, at Richmond, Va., by a joint committee of the Legislatures of those two States, appointed to confer and report on a plan of settlement of the boundary-lines. The conclusions of the report are as follow :

1. That the following headlands of the Potomac River should be the points between which straight lines should be drawn as and for the true boundary-lines between the States of Virginia and Maryland, under the award of J. T. Black and Charles J. Jenkins, arbitrators appointed by the said States to fix the said boundary-lines, to wit: Commencing at Smith's Point, drawing thence a straight line to Cubit's Point, drawing thence a straight line to Cubit's Island, thence westerly to Judith's Point, a point on Judith's Sound, thence westerly to Sandy Point, thence to Ragged Point, thence to Church's Point, thence to White Point, thence to the Upper Machodoc Point, and from Upper Machodoc to Persimmon Point, thence to Machais Point, thence to Matomkin Point, thence to the land on the south shore abreast of Maryland Point to a point on the Potomac Creek opposite Marlboro' Point, thence to Brentz Point, thence to Clifton Point, thence to Cockpit Point, thence to Freestone Point, thence to High Point, thence to Hollowing Point, thence to Whitestone Point, thence to Pevy Point, thence to Sheridan, thence along the south shore to Alexandria, thence to Hunter's Point, thence to Graveny Point, following the south shore and the meanderings of the river to the line of West Virginia and Virginia.

2. That oyster-dredging should be prohibited in the Potomac River west from a line drawn from Point Lookout, in Maryland, to the headland of Smith's Point, in Virginia.

3. That oyster-dredging should be prohibited in Pocomoke Sound.

4. That common rights of fishing and oystering shall be enjoyed by the citizens of both States in that part of Pocomoke Sound north and east of a straight line commencing at Watkins Point, and running thence in a southeasterly direction to buoy R, No. 4, as it is now located upon coast-chart No. 23, of the United States Coast Survey (sheet No. 3, Chesapeake Bay), filed as a part of said award of said Black and Jenkins, making off from a shoal from Messongo Creek, thence with a straight line to the northern boundary of said creek. The rights in any creek or inlet granted hereby by either State and the riparian rights upon the shores of said sound to be respectively protected in the same manner as is provided for in the Potomac River by the compact of 1785. This title to be no longer binding if dredging is authorized by either State.

5. That there shall be concurrent jurisdiction between the States of Maryland and Virginia, by which the violators of the oyster laws may be punished in either State; that a concurrent law be passed restricting the taking of oysters for any lawful purpose in the Potomac River and that part of Pocomoke Sound covered by the concurrent act, from the 1st of October to the 1st of May, and that they be taken for planting or bedding, and may be planted or bedded in the

waters of either State up to and including May 15th, and during all of September, and strictly prohibiting their being taken for sale or planting from May 15th to September 1st: *Provided, however,* That they may be taken to be eaten within the county where taken at any time. And whereas the said committee have recommended that an act be passed to ratify and carry out the said agreement entered into by them with each other, subject to the action of their respective Legislatures, as is witnessed by their signatures, subscribed to this preamble as follows:

William May, H. Atkinson, Jr., on part of Senate of Virginia; E. S. Phillips, N. H. Champlin, on part of House of Delegates of Virginia; John Thomas Bond, F. M. Lancaster, John H. Cooper, on part of Senate of Maryland; John H. Handy, Isaac T. Costen, Sidney E. Mudd, on part of Delegates of Maryland.

STATE INSTITUTIONS.—The Board of Managers of the Maryland Hospital for the Insane, in their last report (November 1, 1882), give a very favorable account of the management of the institution, and of the health of the patients; but they make the same complaint as is made in many other States, of the inadequacy of the hospital for the accommodation of the patients already under treatment, and of the still larger number to whom admission is refused from want of room. The income of the hospital during the year was \$89,431.86, of which the State contributed \$16,250, and the city of Baltimore \$24,161.82; and the expenses were \$89,269.80. The number of patients admitted during the year was 164, of whom 95 were males and 69 females. The whole number treated during that time was 556, of whom 301 were males and 255 were females.

The Asylums for the Deaf and Dumb and the Blind are reported to be in a flourishing condition; but, though they are doing a great deal of good, all who need the training which they afford are not to be found within their walls. The work done in these institutions is purely educational, and they should not be confounded with reformatories or houses of refuge.

EDUCATION.—The annual report of the State Board of Education, submitted to the Governor by Professor M. A. Newell, secretary, states that there are 2,058 public schools in the State, of which 1,937 are in the counties, and 121 in the city of Baltimore. This is an increase of 19 as compared with last year. The total attendance of pupils is reported as 159,945, of whom 111,668 are in the county schools, and 48,277 in Baltimore—an increase of 1,036 over the attendance of 1881. These schools have 3,197 teachers, who receive in salaries \$1,196,558.70, or an average of \$374 each. The total expenses of the schools for the year were \$1,651,908.67. Professor Newell reports that there are several schools in the State in which the teachers are paid less than \$300 per annum, a sum for which the services of competent instructors can not be secured. It is suggested that were the county school boards to limit the number of schools as prescribed by law, namely, one school to each district of four

miles square, they could afford to pay sufficient salaries to employ good teachers and have commodious school-houses, and that a smaller number of good schools would do better work than the larger number of ill-equipped and ill-officed schools now existing. The total receipts of the public-school tax for the fiscal year 1882 were \$479,885.85, which, together with a balance on hand at the beginning of the year of \$260,613.24, made a total available sum of \$740,499.09. The total disbursements of this fund for the year were \$535,855.34, leaving an available balance for school year, commencing October 1, 1882, of \$204,643.75. Schools for the colored people are established in each election district, and are kept open as many months in the year as the schools for the whites. The State Normal Schools, one for white and one for colored teachers, are doing a good work. The number of pupils is larger than it was last year. The other means authorized by law for the improvement of teachers—Teachers' Institutes, District, County, and State Teachers' Associations—have been fully employed during the year with the promise of the best results to the entire State. Higher education is provided by the St. John's, the Western Maryland, Agricultural, Washington, Frederick, and Baltimore Female Colleges, which receive a partial but uncertain support from the State, and consequently are not as flourishing as the friends of education would desire. Three years ago the Agricultural College received \$6,000 per annum from the State, in addition to the proceeds of the land scrip; now it receives no State aid. The effort of its managers now is to make it a purely agricultural and mechanical college, but with its present reduced means its force is materially reduced. Many of the farmers of the State, who might be supposed to be most interested in its success, opposed the continuance of the legislative appropriation for the college, and have expressed great dissatisfaction with its management. In this state of affairs Professor William H. Parker, president of the institution since 1875, tendered his resignation in October, which was accepted by the Board of Trustees. The Maryland Institute for the Promotion of the Mechanic Arts is taking the lead in the advancement of a branch of popular education—drawing—which is much needed and much neglected. The number of students in attendance in the day-school and the night-school is about four hundred. They are instructed thoroughly in every branch of drawing and painting. The McDonough School of Farming and General Education has been eminently prosperous during the year. Each year the value of the school seems to be more widely recognized, as shown by the constantly growing pressure for admission. The new building in course of erection last year has been completed and is now occupied. The wing for use as a boarding-house, which forms part of the original plan, has not been commenced for want

of the necessary means. The trustees have expended nearly \$100,000, which has not only exhausted the accretions set aside for the new buildings, but has created a deficiency of \$29,000, caused by the completion of the buildings under contract, and the erection of an additional wing embraced in the original plan. Until this deficiency has been supplied from the surplus income, the board have determined to be content with the present accommodations, which furnish all that is necessary for educational purposes. The board will not, therefore, for the present, adopt the recommendations of Professor William Allen, the principal, as to the enlargement of the number of students, believing that the advantage arising from an increase of numbers would not justify an increase of the indebtedness already incurred. The present value of the trust is reported to be \$923,375.32, as set forth in the following balance-sheet made up to December 31, 1882:

Dr.			Cr.
City stocks.....	\$705,000 00	Nat'l Mechanics' Bank.....	\$29,000 00
Real estate, farm.....	127,000 00	McDonough trust fund.....	923,375 32
Real estate, New Orleans.....	8,490 87		
New school-buildings.....	99,480 64		
Live-stock on farm.....	7,675 00		
Furniture.....	8,500 00		
Library and instruments.....	1,000 00		
Farm implements.....	2,000 00		
Cash.....	2,728 81		
Total.....	\$952,375 32	Total.....	\$952,375 32

THE JOHNS HOPKINS UNIVERSITY.—Considerable dissatisfaction has been expressed as to the manner in which the trustees of the university have administered the important trust confided to them, especially as to their failure, as was alleged, to locate the institution at Clifton, the founder's country residence, in conformity with Mr. Hopkins's desire. Eight of the trustees, constituting a large majority of the board, have published the following statement in explanation of their conduct:

The Johns Hopkins University was incorporated by certificate, at the request of Johns Hopkins, on August 24, 1867, under the provisions of the act of 1867, chapter 379. That certificate declared that the university thus formed should be located in Baltimore County. The trustees of the university named in the certificate were selected by Mr. Hopkins. There was no organization of the board until June 13, 1870. On that day the trustees met at Mr. Hopkins's request, and by his desire selected Mr. Galloway Cheston, one of their number, as president of the board.

On July 9, 1870, Mr. Hopkins made his will. Among other dispositions of his property he made the following: "I give and bequeath unto the Johns Hopkins University, a corporation formed at my instance under the laws of Maryland, by certificate duly recorded among the records of Baltimore County, my country-place, known as 'Clifton,' containing about three hundred and thirty acres, and all the shares of the capital stock of the Baltimore and Ohio Railroad Company whereof I shall die possessed, except the stock known as preferred stock of said company." He made in his will no other allusion to "Clifton." Those of the undersigned who were familiar with him know that he thought "Clifton" was well adapted for the site of the university, and that he



expected that the university would be located within its limits. He abstained, however, from expressing any opinion upon the subject in his will. He left those whom he had selected as trustees for the management of the university entirely unfettered so far as its plan of education was concerned; and he imposed upon them no condition as to its site, except such as might be implied from the certificate of incorporation, which declared that it should be located in Baltimore County.

On October 31, 1871, he made a codicil to this will. He revoked by that codicil the disposition which he had previously made of the rest and residue of his estate, and gave such rest and residue in equal parts to the Johns Hopkins University and to the Johns Hopkins Hospital, adding to the grant the following significant words: "The share of each corporation in the said rest, residue, and remainder of my real and personal estate to be held, used, and applied by such corporation in, for, and to its corporate purposes in accordance with the provisions of its existing certificate or charter of incorporation, or with the provisions of such act or acts of Assembly amending its certificate or charter of incorporation as the trustees thereof may procure to be passed and accepted."

Can any one doubt who reads this clause that the desire of Mr. Hopkins that the university bearing his name should be successful had outgrown all other wishes? He foresaw that the certificate of incorporation under which the university had been formed might, for some reason, prove inadequate for its intended purpose. Therefore, to prevent, as far as was possible, any failure from lack of sufficient powers in the prosecution of his main design, he expressly authorized the trustees of the university to ask for and obtain any alteration of their certificate charter which they, in their discretion, might think necessary or proper.

Mr. Hopkins died on December 24, 1873. When the trustees took possession of Clifton they found that the place did not possess those conditions of health which it was indispensable that the site of a university should enjoy. It was possible to remove in some degree the causes of malarial disease, which existed within its limits. It was not possible to remedy those dangers which proceeded from the section of country lying between the eastern boundary of the place and Herring Run. Those sources of mischief will exist until they are eradicated by thorough drainage or by the ultimate extension of the city over part of that area.

These and other considerations determined the trustees to apply in 1876 to the General Assembly of Maryland in pursuance of the power expressly given to them by the codicil, to which reference has been made, for such amendment of their certificate charter as would enable them to establish branches of the university and its principal office in the city of Baltimore. They were authorized by the act of 1876, chapter 84, to establish such branches, to purchase and hold all property in said city needed for the particular purposes, and to maintain the principal office of the university in said city.

The trustees having purchased such property in the city of Baltimore as might be needed for their immediate or future uses or which it was desirable to control, proceeded to alter buildings acquired and to build to such extent as was necessary to conduct the business of the university.

The undersigned regret that four of the trustees named by Mr. Hopkins, including Mr. Galloway Cheston, are dead, and that one thus originally selected has resigned. In their present number, however, are five of those to whom he originally committed the trust implied by the creation of the university. Among the five are the three persons whom he selected as executors of his will, one of whom he personally designated as president of "The Johns Hopkins Hospital." The undersigned constitute a large majority of the whole board.

Any differences which have arisen among the undersigned in connection with the management of the institution have been those only which are incident to the administration of all corporate affairs. They venture, however, to say, collectively, that their trusts have been executed with a thorough understanding of their legal and personal obligations, and with the single desire to promote the great objects which Johns Hopkins had in view when he executed the will and codicil to which they have referred.

GEO. W. DOBBIN. GEO. WM. BROWN.  
CHAS. J. M. GWINN. JAS. CAREY THOMAS.  
FRANCIS WHITE. J. H. PLEASANTS.  
FRANCIS T. KING. JOS. P. ELLIOTT.

The Johns Hopkins University was the recipient of a very valuable Christmas present from several prominent German citizens of Baltimore, being the collection of books and pamphlets which the late Swiss statesman and publicist, Jean Gaspard Bluntschli, had made during his literary life in Switzerland and Germany. The gift was largely due to Professor C. T. Raddatz, of the Baltimore City College, who, when he heard that the library was to be sold, suggested the purchase and gift of it to the Johns Hopkins University, as the Germans of San Francisco had purchased the library of Francis Lieber and presented it to the University of California.

One of the most memorable events of the year was the munificent act of Mr. Enoch Pratt in founding a free public circulating library in the city of Baltimore, which by the conditions of the gift shall be forever the property of the public, to be enjoyed by intelligent men and women from generation to generation. He gave to the city a building valued at \$225,000, and he offers for the maintenance of the library a fund of \$833,333.33, which at 6 per cent will produce annually the sum of \$50,000, provided the city appropriates a similar sum annually for the support of the institution. The purpose of the gift is as laudable as the gift itself is liberal. To stimulate the taste of the people to read good books, tends directly to make them better and more useful citizens. The Peabody Institute, at its twenty-fourth annual meeting, expressed its appreciation of Mr. Pratt's liberality by the following resolution, which was unanimously adopted:

The board desires to express its gratification at the munificent donation of Mr. Enoch Pratt for establishing a free circulating library in our city. Meeting, as it does, a want long felt and supplementing so effectively the library department of this institution, it is eminently proper that the board should unite in the public voice of approval and gratitude now echoing from all sections of the community.

INDUSTRIES.—The canning of fruits and vegetables has become a very large and profitable industry in Maryland, especially in Harford, Cecil, and Kent Counties. Carefully prepared statistics show that in one county—Harford—there are 400 canning establishments, using 130,000 boxes of tin, and employing 20,000 persons during the season. During the past year there were packed over 1,000,000 three-pound cans of tomatoes and 500,000 cans of



corn, using the production of 10,000 acres of tomatoes and 5,000 acres of corn, the out-door labor on which amounted to \$200,000, and in the canning establishments to \$900,000, besides \$135,000 paid for cans. In Cecil and Kent Counties the canned-peach trade is rapidly growing. The parties interested in this trade are strenuously opposed to any increase in the duty on tin, and have appointed a committee to go to Washington to confer with the Committee of Ways and Means on the subject. There are more than 120 establishments for preserving fruits, vegetables, oysters, etc., which consume 20,000,000 tin cans per annum, and, together with the dredging of the Chesapeake, in which 1,000 schooners and 3,500 smaller craft are employed in securing and bringing to market 2,000,000 bushels of oysters, \$30,000,000 of capital and 34,000 hands are employed. In the manufacture of "fertilizers," of which upward of 300,000 tons are made annually—half the consumption of the United States—2,500 hands are employed in 27 factories. The cotton-mills in the vicinity of Baltimore drive 125,000 spindles, and employ 4,000 hands in the manufacture of sail and tent cloth, netting, twine, drills, etc. Mr. John Garrett, President of the Baltimore and Ohio Railroad Company, has obtained a liberal charter from the United States Government for the construction of an ocean cable, to be operated in connection with the system of land telegraphs of the Baltimore and Ohio Company. Under the charter, no amalgamation with any existing cable-line can be made.

There has been a great falling off in the quantity of sugar imported into Baltimore during the year, as compared with 1881 and previous years. The amount received was 4,470 hogsheads, 9,054 bags, and 120 tierces, which is nearly one half of the quantity imported last year, and most of this was forwarded to New York and Philadelphia to be refined. Business men in Baltimore differ as to the proper means to be employed to revive the trade. Some favor the continuation of the Dutch standard as the means of determining the quality of the sugar, with an *ad valorem* duty. Others consent to the use of the polariscope in settling the saccharine strength of imported sugars; while many favor the adoption of a specific duty per pound on all grades, which would allow the admission of the higher or grocery grades. The heavy business once done in refining sugars in Baltimore has been transferred to New York and Philadelphia, and little hope of its restoration is felt or expressed. At one time the sugar-trade of Baltimore amounted to \$25,000,000.

The late Thomas Wilson, of Baltimore, bequeathed \$500,000 for the establishment of a "Sanitarium," where the sick children of the poor can be taken during the summer, and receive the benefits of pure air, good food, and proper medical attendance. The class of chil-

dren to be treated will be mostly under two years of age, and in most cases the mother will accompany her child; but if there be other children, under five years of age, who can not be left at home, they will be taken also. All expenses are borne by the institution. The trustees have purchased 170 acres of land on the line of the Western Maryland Railroad, nine miles from Baltimore, and 600 feet above mean tide, and are erecting the necessary buildings, in the expectation that this charity will be operative during the summer of 1883. Mr. Wilson also gave \$100,000 to the "Thomas Wilson Fuel-saving Society," the object being to aid poor sewing-women in procuring sewing-machines, or other mechanical aids, and to sell fuel to deserving poor at a low rate. During this year 200 deserving poor women have been aided in getting sewing-machines at a price somewhat less than the wholesale factory rate, they undertaking to repay the society in small monthly installments. About 1,400 tons of coal have been sold to worthy indigent persons, at half the dealers' retail price. The trustees are only permitted to use the income of the funds. The principal is kept intact.

The Johns Hopkins Hospital, the foundations of which were laid in 1875, is progressing steadily toward completion. There are now twelve buildings under roof, and it is expected the institution will be finished and ready for occupancy in 1885. The amount of the endowment was \$3,333,330, of which \$2,036,028.75 is in bonds and stocks, and \$1,375,542.07 is in real estate. The expenditure up to December 31st has been \$1,304,167.31. The trustees intend that it shall be "the model hospital of the world."

#### MASSACHUSETTS. STATE GOVERNMENT.

—The State officers during the year were the following: Governor, John D. Long; Lieutenant-Governor, Byron Weston; Secretary of State, Henry B. Peirce; Treasurer, Daniel A. Gleason; Auditor, Charles R. Ladd; Attorney-General, George Marston; Adjutant-General, A. H. Berry; Secretary of Board of Education, John W. Dickinson; Secretary of Board of Agriculture and State Librarian, John G. Russell; Insurance Commissioner, Julius L. Clarke. Judiciary, Supreme Court: Chief-Justice, Marcus Morton; Associate Justices, William C. Endicott, Otis P. Lord, Walbridge P. Field, Charles Devens, William Allen, Charles Allen.

LEGISLATURE.—The Legislature convened on the 5th of January and adjourned on the 27th of May. During the session 274 acts and 61 resolves were passed. Having sat one hundred and forty-three days, a longer period than any of its predecessors since that of 1874, when a prorogation was made on the morning of July 1st, and a term equalled by those of but ten of the fifty Legislatures of whose duration there is a record, the General Court of the year 1882 added but little to the Public Statutes, because of the recent revision of the General Laws; its



special enactments were multifarious and of widely differing character.

That the Commonwealth might free itself from business entanglements, it was determined that it should exchange the shares of the stock of the Boston and Albany Railroad Company which it holds for bonds of that corporation, to run twenty years, with interest at 5 per cent per annum, at the rate of \$160 in the face value of the bonds for each \$100 in the par value of the stock, and that it should make a similar transfer of its shares of stock of the New York and New England Railroad Company, for which it should take second-mortgage bonds of the corporation, to run twenty years, with interest at 6 per cent per annum, on the basis of \$50 in the face value of the bonds for \$100 in the par value of the stock. On the former of these measures the company by a majority of its stock has acted affirmatively. The act relative to the New York and New England Railroad Company provides that it may issue its second-mortgage bonds to the amount of \$5,000,000, of which \$1,737,500 are to go to make the exchange, and the remainder to be used in laying a second track and in providing for its outstanding unsecured liabilities.

The Old Colony Railroad Company may unite with the Boston, Clinton, Fitchburg and New Bedford Railroad Company on such terms and conditions and with such guarantees as may be mutually agreed upon by their stockholders, and with this view the former is authorized to purchase and hold the stock of the latter, the name of the united corporation, which is to have and to enjoy all the franchises, powers, privileges, property, and rights of those of which it is to be formed, to be known as the Old Colony Railway Company. After the union the corporation may increase its capital stock to \$12,000,000, the money secured by the sale of the new stock, which may be \$2,000,000 in amount, to be applied to the payment and reduction of the company's debt, and to the provision of additional equipment and improvement of its railroad and other property. The company may lease, by the agreement thereto of the stockholders of both corporations, the railroad, franchise, and property of the Fall River Railroad Company for such length of time and on such terms as may be fixed upon. The company may take land in South Boston for raising its track over the proposed extension of D Street, and at Braintree, for making and maintaining a convenient connection between its South Shore Branch and its main line.

The Eastern Railroad may increase its capital stock by issuing not more than \$5,000,000 in shares of the par value of \$100 each, which shall be designated as preferred stock, which shall annually receive, out of the net earnings of said corporation, not more than \$6 per share, and which shall be issued at par value to cancel certificates of the indebtedness of the company.

The general railroad law enacted in 1874 has been so modified that, in addition to the prerequisites required by it, a corporation intending to construct a railroad must, before a location for it is granted, satisfy the Railroad Commissioners that there is an exigency for it, and that the distance from the State-House, within which a branch road may be built, is reduced from eight miles to three miles.

Hereafter no railroad company can, in doing its freight business, make or give any undue or unreasonable preference or advantage to or in favor of any person, firm, or corporation, nor subject any person, firm, or corporation to any undue or unreasonable prejudice or disadvantage.

It is required that each car of every passenger train, including mail and baggage cars, shall be supplied with at least one set of tools, consisting of an axe, a sledge-hammer, a crow-bar, a handsaw, and a pail, all of which shall be kept, in good condition, in some convenient place, and manner approved by the Board of Railroad Commissioners.

Any party aggrieved by a decision of County Commissioners in cases where a highway or townway and a railroad cross each other may appeal therefrom to the Board of Railroad Commissioners, which shall have the same power in the premises that the County Commissioners originally had.

In pursuance of its policy of putting its railroad in the best condition for business, the State is to expend \$250,000 in adding to the double tracking of the Hoosac Tunnel and Troy and Greenfield Railroad.

Any city or town may, for the purpose of devoting a portion of the territory of such town or city to the preservation, reproduction, and culture of forest-trees for the sake of the wood and timber thereon, or for the preservation of the water-supply of such town or city, take or purchase any land within the limits of such town or city, may receive donations of money or land for the said purposes, and may make a public domain of the land so donated, the titles thereof to be vested in the Commonwealth, and to be held in perpetuity for the benefit of the town or city in which such land is situated.

At the Massachusetts Agricultural College there is to be established an agricultural experiment station for the purposes of investigating the diseases of domestic animals, of plants, and of trees; the history and habits of insects destructive to vegetation, and the means of their abatement; the manufacture and composition of both foreign and domestic fertilizers, to determine their several values and their adaptability to different crops and soils; the values of forage, grain, and root crops as food for farm-animals; the comparative worth of green and of dry crops; and the adulteration of any article of food intended for the use of men and animals.

It was resolved that the Governor and Council consider the expediency of providing separ-

rate homœopathic treatment of insane persons under the care of the Commonwealth, who shall desire such treatment; and, if they shall determine that it is desirable, they are requested to present to the next General Court some practicable plan for the establishment of a hospital for such treatment, for which any vacant premises owned by the State may be appropriated.

Hereafter savings-banks and institutions for savings may invest their deposits and the income derived therefrom in the legally authorized bonds of the States of Pennsylvania, Ohio, Michigan, Indiana, Illinois, Wisconsin, and Iowa, and of the District of Columbia, or in the legally authorized bonds for municipal purposes of any of the cities in the aforesaid States and the State of New York, which has at the date of such investment more than fifty thousand inhabitants, and whose net indebtedness does not exceed five per cent of the valuation of the taxable property therein; and they may loan upon the note or notes of any citizen of this State, with a pledge as collateral of any of the aforesaid securities, at no more than eighty per cent of the market value thereof.

A savings-bank or institution for savings is limited in its investments in the stock of any one bank or banking association to three per cent of the amount of its deposits at the time of the purchase of such securities.

At the end of one year after the date of final settlement, the Commissioners of Savings-Banks are to take and keep all the books and papers of insolvent savings-banks and institutions for savings, including those of the receivers.

In attempted legislation on the liquor-traffic the failures were more conspicuous than the successes. Most noticeable was the rejection of a stringent prohibitory bill which the House threw out by a tie-vote of 110 to 110, all but seven of its members being accounted for either by their direct assent or dissent, or by their pairs. There were also negative measures providing for a limit to the number of licenses, for increasing the price of such licenses, and for the prohibition of the use of any part of the premises on which a license is exercised for residential purposes. The noticeable measures that became laws are as follow:

Every common victualer holding a license to sell liquors must keep his premises closed from twelve o'clock at night until five o'clock in the morning.

The granting of a license to sell liquors on premises within four hundred feet of a public school on the same street is prohibited.

The tax levy fixed upon for the year is \$2,000,000, an amount of \$500,000 in excess of that assessed and collected last year and the year before, to meet the current expenses of the Commonwealth; this increase is made because of the reduction of the tax on the deposits in savings-banks and institutions for savings from three fourths of one per cent to one half of one per cent.

The chairman of the Committee on Printing on the part of the Senate, the chairman of said committee on the part of the House of Representatives, the Secretary, Treasurer, and Auditor of the Commonwealth, the Clerk of the Senate and the Clerk of the House of Representatives, are to make a contract for the execution of all the printing for the several departments of the government of the Commonwealth for a term of five years from the first day of July, in the year 1882.

A person who, having been arrested on a criminal process, is required to furnish sureties for appearance before any court or trial justice, may in place thereof give a personal recognizance, and deposit the amount of bail ordered with the court, trial justice, or magistrate who has authority to take the recognizance.

It was enacted that the provisions of law relating to the qualification and admission to practice of attorneys-at-law shall apply to women.

To harmonize the laws governing the observance of legal holidays it was enacted that when Christmas occurs on Sunday the day following shall be a legal holiday.

Many of the measures upon which much time was spent, and which were quite as important as a large number of those that have become parts of the public statutes, were rejected, while others were referred to the next General Court.

FINANCES.—The receipts and expenses on account of revenue for the year 1882, including cash on hand, were:

Cash in the Treasury, January 1, 1882.....	\$1,351,699 39
Revenue receipts during the year.....	8,090,356 59
Total.....	\$9,441,995 93
Payments.....	7,648,062 16
Revenue cash, January 1, 1883.....	\$1,793,938 22

The comparative results for the years 1882 and 1881 are as follow:

	1882.	1881.
Ordinary expenses.....	\$1,667,925 40	\$1,648,236 03
Exceptional expenses.....	5,049,386 63	5,286,167 04
Totals.....	\$6,717,312 03	\$6,934,403 06

In these aggregates are included the corporation and national bank taxes returned by the Commonwealth to cities and towns, etc. These should be deducted, to show the actual expenses, viz., \$2,275,892.99 in 1882, and \$2,243,437.51 in 1881. With these deductions the expenses of 1882 were \$4,441,419.04, and in 1881, \$4,690,966.15, showing that the expenses of 1882 were \$249,547.11 less than in 1881. The principal expenses of the year 1882 were:

Interest on the public debt.....	\$1,647,825 28
Legislative department.....	205,822 40
Executive and other departments.....	89,864 02
State-House and Pemberton Square.....	25,660 57
Commissioners.....	79,696 16
Printing.....	41,247 59



Educational.....	\$87,822 72
Judiciary.....	192,991 72
Public buildings.....	46,601 86
Agricultural department.....	52,487 02
State and military aid, including expenses of the Commissioners.....	427,105 59
Charitable, ordinary and exceptional.....	452,723 05
Reformatory and correctional.....	319,385 73
Military, ordinary and exceptional.....	143,755 06
Gratuities.....	62,565 42
Exceptional on State House.....	16,995 26
Troy and Greenfield Railroad and Hoosac Tunnel.....	456,278 65
Total.....	\$4,317,630 95

The number of cities and towns paying State aid was 562; that of the persons to whom such aid was rendered was 6,723, of which 2,805 were invalid pensioners, 591 wives of invalid pensioners, 2,332 widows of invalid pensioners, 941 mothers and 54 fathers of invalid pensioners. The number of indigent soldiers and sailors aided was 1,889. The Surgeon-General examined 321 applicants for State aid; the total payments for which to January 1, 1883, were \$17,868.81. The estimates for the year 1883 are:

Legislative department.....	\$208,600 00
Other State departments.....	379,085 00
Charities.....	449,400 00
Reformatories and prisons.....	393,500 00
State and military aid.....	413,000 00
Interest, including January payment, 1884.....	1,720,000 00
Military department.....	159,400 00
Agricultural department.....	23,000 00
Troy and Greenfield Railroad.....	650,282 00
Other items.....	241,423 00
Total estimated expenditures.....	\$4,582,940 00

## ESTIMATED REVENUE.

Corporation taxes, net.....	\$475,000 00
Bank-stock taxes, net.....	490,644 00
Savings-bank tax.....	725,000 00
Insurance taxes and licenses, including Massachusetts Hospital Life-Insurance Company.....	225,000 00
Excise tax on life-insurance companies.....	95,000 00
Hawkers and peddlers.....	17,000 00
State-Prison income.....	100,000 00
Alms-house, Women's Prison and Reform School income.....	18,000 00
Secretary's fees and commissions.....	20,000 00
Cities and towns for support of paupers.....	85,000 00
Railroad commissioners.....	17,735 00
Fees from courts of insolvency.....	9,000 00
Liquor licenses.....	150,000 00
Confiscated liquors.....	1,000 00
Coal and mining companies' taxes.....	24,000 00
Troy and Greenfield Railroad and Hoosac Tunnel (manager's estimate).....	275,000 00
Miscellaneous.....	28,000 00
Total estimated revenue.....	\$2,700,429 00
Add cash in the Treasury.....	1,798,933 82
Total.....	\$4,499,362 82
Estimated revenue.....	4,494,362 82
Estimated expenses, as above.....	4,582,940 95
Deficit.....	\$83,578 13

The amount of State tax required was not estimated.

Including cash on hand at the beginning of the year, the following is a summary of the transaction on account of funds:

Cash on hand, January 1, 1882.....	\$3,120,313 14
Receipts during the year.....	16,462,915 13
Total.....	\$19,583,228 32
Payments on this account.....	17,143,825 40
Cash on hand, January 1, 1883.....	\$2,439,402 92

The cash balance as shown above stands to the credit of the following funds:

Troy and Greenfield Railroad Sinking Fund....	\$498,204 85
Bounty Loan Sinking Fund.....	738,958 89
Boston, Hartford and Erie Railroad Sinking Fund.....	106,692 52
Coast-Defense Loan Sinking Fund.....	5,627 99
War Loan Sinking Fund.....	18,847 70
Prison and Hospital Loan Sinking Fund.....	864,006 09
Commissioners' Public Lands Fund.....	31,368 23
Commonwealth Flats Improvement Fund.....	144,659 78
Harbor Compensation Fund.....	49,690 92
Income Harbor Compensation Fund.....	26,418 63
Massachusetts School Fund.....	218,029 26
Technical Educational Fund Commonwealth Grant.....	106,575 85
Income Technical Educational Fund Commonwealth Grant.....	8,579 25
Income Technical Educational Fund United States Grant.....	425 00
Todd Normal School Fund.....	1,850 00
Income Massachusetts School Fund.....	72,182 90
Income Todd Normal School Fund.....	266 03
Income Rogers Book Fund.....	80 00
Unclaimed dividends of insolvent insurance companies.....	6,221 72
Savings-Bank Trust Fund.....	948 25
Total.....	\$2,439,402 92

The aggregate net indebtedness of municipalities in Massachusetts in each year from 1871 to 1881, and the total property valuation, were as follow:

YEARS.	Valuation.	Debt.
1871.....	\$1,497,351,656	\$39,421,298
1872.....	1,696,599,969	45,221,745
1873.....	1,763,429,990	53,380,118
1874.....	1,831,601,165	64,904,069
1875.....	1,840,792,723	71,784,006
1876.....	1,769,359,481	72,165,156
1877.....	1,668,226,792	72,049,685
1878.....	1,568,988,210	68,864,685
1879.....	1,529,521,014	67,728,557
1880.....	1,584,756,802	68,512,927
1881.....	1,684,289,976	65,408,691

The funded debt of the State on the 1st of January, 1883, amounted to \$32,399,464, represented by \$11,904,000 in dollar bonds, and £4,234,600 in sterling of the value of \$4.84 to the pound—\$20,495,464.

The following is a classification of the debt:

Railroad loans.....	\$17,816,757 60
War loans.....	10,495,567 80
Public buildings, etc.....	4,199,855 80

Total as above.....\$32,511,680 90

The maturity of the debt is shown in the following statement:

1882.....	\$1,088,000 00	1894.....	\$9,637,148 90
1883.....	8,078,061 25	1895.....	4,855,537 25
1884.....	8,159,381 80	1896.....	1,100,000 00
1885.....	505,129 55	1897.....	520,000 00
1886.....	8,834,742 75	1900.....	3,618,729 40
1887.....	1,065,000 00		

The amount of sinking funds January 1, 1883, was \$16,914,263.05, an increase of \$2,118,988.07. Of this increase \$1,737,000 came from the exchange of the stock of the New York and New England Railroad Corporation for its bonds; \$330,322.94 from the exchange of the stock of the Boston and Albany Railroad Corporation for its bonds; \$43,757.93 from the sale of lands; \$62,040.60 from transfers of balances of accounts on the books of the Treasurer; \$9,087.91 from the income of the old State-Prison, and the balance from invest-

ments. The following statement shows the condition of the sinking funds and other resources pledged thereto by existing laws:

Troy and Greenfield Railroad Sinking Fund...	\$5,620,769 61
Bounty Loan Sinking Fund.....	5,538,056 49
Boston, Hartford and Erie Railroad Sinking Fund.....	3,059,242 87
War Loan Sinking Fund.....	1,000,000 00
Coast-Defense Sinking Fund.....	867,827 99
Prison and Hospital Loan Sinking Fund.....	853,866 09
Add market value in excess of cost.....	500,000 00
Total sinking funds.....	\$17,444,268 05
Estimated value of salable Back Bay lands.....	800,000 00
Unsettled claim against the United States, estimated.....	250,000 00
Claim against the Boston and Albany Railroad Company.....	100,000 00
Land in Boston Harbor, cost about.....	800,000 00
Total resources for payment of the debt.....	\$18,894,268 05
Total debt of the Commonwealth.....	32,511,680 90
Resources pledged for its payment.....	18,894,268 05

Total debt, less resources pledged for its payment.....\$13,617,417 85

#### TRUST FUNDS.

Harbor Compensation Funds.....	\$149,630 92
Massachusetts School Fund.....	2,711,263 26
Technical Educational Fund, Commonwealth Grant.....	141,575 25
Technical Educational Fund, United States Grant.....	219,000 00
Todd Normal School Fund.....	12,100 00
Rogers Book Fund.....	1,000 00
	\$3,234,569 43

#### OTHER FUNDS.

Commonwealth Flats Improvement Funds....	\$294,659 76
Commissioners' Public Lands Fund.....	11,868 23
Unclaimed dividends of insolvent insurance companies.....	6,221 72
Savings-Bank Trust Fund.....	943 28
Reform School Fund in hands of treasurer of the institution.....	38,062 50
	\$421,255 49

The total valuation of the State in 1882 was \$1,684,213,423, of which \$1,189,524,370 was real estate, and \$491,689,053 personal property.

The following table shows the total valuation by counties in 1881 and 1882:

COUNTIES.	1881.	1882.
Barnstable.....	\$15,555,286	\$16,212,923
Berkshire.....	34,197,842	34,467,072
Bristol.....	103,294,547	107,341,008
Dukes.....	8,190,798	8,197,431
Essex.....	162,413,423	167,445,513
Franklin.....	15,808,500	16,127,080
Hampden.....	69,758,228	73,076,206
Hampshire.....	25,285,744	25,160,183
Middlesex.....	268,986,013	273,212,897
Nantucket.....	2,352,123	2,536,454
Norfolk.....	39,424,009	40,985,827
Plymouth.....	41,597,896	44,887,466
Suffolk.....	635,321,125	669,679,819
Worcester.....	131,054,433	135,878,044
Totals.....	\$1,648,239,976	\$1,684,213,423
Total gain.....		35,973,447

The valuation of the twenty-one cities of the State was as follows:

CITIES.	1881.	1882.
Boston.....	\$665,554,597	\$672,497,961
Brockton.....	6,876,427	9,150,702
Lowell.....	42,785,735	46,414,412
Worcester.....	42,606,539	45,502,513
Cambridge.....	51,093,230	50,668,280
Fall River.....	39,650,761	41,900,475
Lawrence.....	25,349,410	26,269,506
Lynn.....	24,952,084	24,465,909
Springfield.....	32,746,016	34,282,678
Salem.....	28,767,679	25,511,242
New Bedford.....	27,115,322	28,112,887
Somerville.....	27,569,140	28,156,200
Holyoke.....	11,977,410	13,374,055
Chelsea.....	15,761,537	16,893,823
Taunton.....	15,547,611	16,008,677
Gloucester.....	8,977,559	9,470,813
Haverhill.....	10,787,038	11,518,621
Newton.....	26,408,273	26,385,718
Newburyport.....	7,535,456	7,417,698
Fitchburg.....	9,508,584	10,118,596
Malden.....	10,339,075	10,928,859
Total net gain.....		\$28,084,073

The total tax levied for State, county, and city or town purposes in 1882 was \$26,090,914.

The 166 savings-banks of the State report the following for the years ending October 31, 1881 and 1882:

DETAILS.	1881. 165 banks.	1882. 166 banks.
Number of open accounts.....	738,951	772,518
Amount of deposits.....	\$280,444,479 10	\$241,811,862 49
Number of deposits during year preceding.....	615,514	677,422
Amount of same.....	\$43,223,496 86	\$49,234,652 63
Number of deposits received during year, of and exceeding \$800 at one time.....	36,604	36,657
Amount of same.....	\$20,753,979 53	\$19,773,518 76
Number of withdrawals during the year.....	49,959	458,494
Amount of same.....	\$40,212,786 44	\$44,818,521 56
Number of accounts opened during the year.....	118,381	123,702
Number of accounts closed during the year.....	86,991	89,752
Amount of surplus on hand.....	\$4,590,600 67	\$5,032,414 74
Amount of guarantee fund.....	3,341,062 35	4,027,205 28
Public funds.....	39,432,620 54	36,153,027 36
Loans on public funds.....	1,558,750 00	716,404 62
Bank-stock.....	24,937,671 02	25,309,927 03
Loans on bank-stock.....	1,008,439 33	1,117,137 29
Deposits in banks bearing interest.....	11,770,415 27	12,907,905 40
Railroad bonds.....	7,802,403 05	9,016,755 11
Invested in real estate.....	2,546,902 85	2,540,368 88
Real estate by foreclosure.....	8,052,450 79	7,201,605 50
Loans on mortgage of real estate.....	82,518,068 04	86,129,137 61
Loans to counties, cities, and towns.....	8,684,666 39	9,298,505 17
Loans on personal security.....	48,349,666 59	56,928,185 64
Cash on hand.....	1,061,651 06	1,060,480 21
Average rate of ordinary dividends for last year.....	4 per cent.	3.97 per cent.
Aggregate amount of earnings.....	\$12,255,345 35	\$12,615,648 65
Aggregate amount of ordinary dividends.....	8,293,774 37	8,530,835 21
Number of outstanding loans not exceeding \$3,000.....	32,777	34,108
Amount of same.....	\$34,020,554 95	\$36,192,801 16
Annual expenses of the institutions.....	167,672 51	619,822 24



STATISTICS.—These figures, taken from the report of the Secretary of the Commonwealth on the corporations of the State, show their number and condition each year from 1870 to 1882, inclusive:

YEAR.	No.	Amount of capital paid in.	Total assets.	Total liabilities.
1870....	181	\$89,010,227	\$56,999,878	\$18,984,571*
1871....	596	114,134,786	162,202,732	51,993,398*
1872....	659	122,570,023	182,415,165	60,186,886*
1873....	667	131,253,840	211,371,742	78,966,236*
1874....	724	141,761,394	228,528,526	85,178,848*
1875....	728	140,495,253	241,608,145	243,520,268†
1876....	758	150,889,066	249,601,076	250,572,195†
1877....	752	147,665,201	244,059,994	252,772,780†
1878....	739	140,359,554	231,427,335	240,776,897†
1879....	742	142,429,708	231,683,644	240,701,081†
1880....	771	143,605,224	242,998,175	251,363,058†
1881....	838	161,927,122	278,538,805	287,019,164†
1882....	872	166,751,898	295,592,412	303,090,568†

The loss of property and life in the Gloucester fisheries during 1882 was greater than for the past two years combined, and largely in excess of any previous year since 1876, with one exception, as will be seen from the following table:

YEAR.	Vessels.	Tons.	Value.	Insurance.	Lives.
1876.....	27	1,095-46	\$150,000	\$116,222	212
1877.....	8	722-33	45,000	22,000	39
1878.....	13	907-57	64,794	49,067	56
1879.....	29	1,898-36	111,056	90,582	249
1880.....	7	300-44	21,000	15,972	52
1881.....	8	511-51	81,000	20,498	56
1882.....	13	948-74	79,700	54,460	115

It is reported that the aggregate losses in the fishing business from Gloucester from 1830, when the Georges fisheries began, up to April 1, 1882, have been 2,351 lives, and 428 vessels, valued at \$1,862,710.

From the fourteenth annual report of the Railroad Commissioners, it appears that the mileage of roads in the State was increased during the year ending September 30, 1882, by the building of twenty-one and a half miles. The total mileage is 2,778 of main line and branches, of which 750 miles is double track. The increase in double track is sixty-five miles. The increase in track was 108 miles. The average cost of standard-gauge roads is returned at \$59,767.18 per mile; the cost of equipment per mile operated averages \$6,211.31—making the average cost of a standard-gauge road, with equipment, \$65,978.49. The cost of narrow-gauge roads averages \$29,373.23 per mile, and \$7,013.62 per mile additional for equipment. Returns were received from sixty-seven corporations, an increase of two. The aggregate capital stock was \$122,976,262.26, an increase of \$820,648.14. The net debt of the companies—the gross debt less cash assets—amounts to \$71,918,806, an increase of \$7,062,915.24. On the other hand, the cash assets of all the railroad companies of the State have increased to the amount of \$2,843,006.23. The returns for the last six years are as follow:

YEARS.	Stock.	Net debt.
1877.....	\$118,170,201 03	\$52,914,826 15
1878.....	119,045,229 92	52,646,056 24
1879.....	118,890,398 88	55,755,418 06
1880.....	118,788,871 58	59,172,520 26
1881.....	122,155,614 12	64,850,590 76
1882.....	122,976,262 26	71,918,806 00

The total gross income for the year was \$40,846,370.20, an increase of \$3,081,974.27, or 8.1 per cent. The following shows the figures for four years:

YEARS.	Gross income.	Increase.
1879.....	\$30,812,964 54	\$1,259,955 78
1880.....	35,140,874 77	4,327,410 28
1881.....	37,764,395 88	2,624,021 06
1882.....	40,846,370 10	3,081,974 27

The total expenses—including rents paid—of all the corporations amounted to \$29,944,167.15, an increase of \$2,881,522.92. The net income was \$10,902,202.95, being an increase of \$200,451.85. The passenger earnings were \$19,567,274.71, an increase of \$2,238,779.23 over the year 1881, when they amounted to \$17,328,495.48. The freight earnings were \$19,527,094.54, an increase of \$919,287.15, or nearly 5 per cent over those of last year, which amounted to \$18,607,807.39. The local passenger earnings were \$12,679,634.51, an increase of \$1,360,702.85 over the figures of last year, which were \$11,318,931.66. The through passenger earnings were \$5,162,321.42, an increase of \$564,543.56 over the amount for last year, which was \$4,597,777.86. The express, mail, and other earnings included in total passenger earnings, as given above, amounted to \$1,725,318.78, being an increase of \$313,532.82, this item having been in 1881, \$1,411,785.96. The local freight earnings were \$9,955,675.74, an increase of \$882,388.85. Through freight was \$9,408,552.43, an increase of \$51,324.63. The income from all other sources of the freight department amounted to \$162,866.37, as against \$177,292.70, a decrease of \$14,426.33.

The total passenger mileage was 892,321,207; total freight mileage, 1,130,070,652. The increase of passenger mileage—or passengers carried one mile—for the year amounts to 103,898,446. The increase of freight mileage, or tons of freight carried one mile, amounts to 49,267,856. The total number of passengers carried was 55,868,694, showing an increase of 6,034,203 over the previous year. The whole number of tons of freight carried was 19,061,164, as against 17,971,072, showing an increase of 1,090,092 tons.

The total amount of dividends paid was \$6,271,189.86, a decrease of \$16,726.96 over last year. Of the sixty-six corporations, thirty-six paid dividends varying from 2 to 10 per cent. The following shows the amount paid in dividends by all the corporations for ten years, with the percentage to capital stock, and also the amount of interest paid:

\* Not including capital.

† Including capital and reserves.

YEARS.	Amount of dividends.	Per cent, capital stock.	Interest paid.
1872-'73.....	\$7,280,456 02	6-34	\$1,846,783 16
1873-'74.....	6,988,170 85	6-11	2,791,572 28
1874-'75.....	6,783,670 93	5-97	3,152,862 45
1875-'76.....	8,888,509 49	4-95	3,704,698 88
1876-'77.....	5,429,183 31	4-60	3,487,026 83
1877-'78.....	5,529,927 40	4-68	3,126,925 34
1878-'79.....	5,264,491 78	4-90	3,172,990 59
1879-'80.....	5,987,718 64	5-05	3,423,752 25
1880-'81.....	6,257,866 82	5-15	3,748,292 55
1881-'82.....	6,271,189 86	5-10	4,291,222 59

The average number of persons employed reaches a total of 27,403, showing an increase for the year of 1,880. The whole number employed by all corporations making returns to the board is 30,904.

The tabulated statement of accidents shows that the whole number of persons injured was 414, or one less than the previous year. Of this number, only 27 were passengers, against 42 in 1881. The number killed was 163, against 184 the previous year. The number of employes injured, not fatally, was 142; the number killed was 56. The corresponding numbers for 1880-'81 were 128 and 72.

The number of trespassers killed during the year was 75, and the number of injured and not killed was 57. Of the whole number, 109 were walking, standing, or lying on the track, and 23 were unlawfully riding on the cars. Among the number killed, 7 are reported as suicides. The number injured at highway crossings was 54, of whom 21 were killed. Of the 54, 29 were injured at crossings guarded by gates or flags, and 25 at unguarded crossings.

The amount of damages paid in ten years by the eight roads of standard gauge terminating in Boston is \$1,211,587.10, or an average of more than \$120,000 annually. This was exclusive of all damage to freight or rolling stock, and of legal expenses attending suits.

**GUBERNATORIAL RECOMMENDATIONS.**—Governor Butler, in his message to the Legislature, recommends the abolition of the poll-tax as a prerequisite to voting. He says:

I believe in such a tax as a duty of the citizen, but not as a qualification to his suffrage. Every man ought to pay, according to his ability, his just share of the burden of maintaining the government which protects himself, his family, and his property, and which affords the means of education to his children. But the penalty for non-payment should not be disfranchisement and loss of citizenship; that is too severe, and in all civilized countries is only attached to the highest crimes.

It is the duty of every man to attend and take part in every election, and by his vote to give his assent to the laws which may be passed by his chosen representative; for all governments derive their "just powers from the assent of the governed."

This duty of a freeman was enforced by our fathers in the earliest colony time. In 1660 towns in Massachusetts passed and enforced the following by-law:

"It is likewise ordered that if any man who is warned to any town meeting be not there when he is called, he shall be liable to pay 6*d*. If he come not at all, 1*8d*. Nor shall any depart without leave, upon the like penalty."

How different are the provisions of law now by which the State practically offers a bounty of from

one to two dollars to any citizen who will stay away from town meeting!

Let, therefore, a nominal poll-tax for State purposes be assessed as now on the polls of the citizens, and then, if any citizen chooses to pay it, by doing his duty as a citizen by voting, let that act be a discharge and payment of such tax.

That would be a payment "in kind" by the freeman doing his duty as our fathers required him to do it, by fining him if he did not attend town meeting, as we have already seen.

He also recommends amendments to the registration laws making registration easier, and that all ballots be inclosed in self-sealing envelopes of the same size, quality, and color, to be furnished by the State. On the right of suffrage for women he says:

For myself, I believe that that right is given them by the Constitution of the United States. By the decision of the courts, I am overruled in my action on this subject, but not in my convictions. It is an experiment in our government which never has been here practically tried. For, although women are allowed to vote for a single class of municipal officers, yet there are so many restrictions and impediments thrown around it, that no woman with a proper spirit of self-respect ought to allow herself to pass through the ordeal to attain a useless privilege of voting thus invidiously. This, I believe, is the esteem in which it is held by a majority of the most estimable women of the Commonwealth.

Women can not be permitted to vote in this Commonwealth, by our Constitution, for national or State officers (except for presidential electors) if the law were changed; but they may vote, if the law so provides, in municipal elections.

While this experiment ought to be fully made, yet it can not be so, as we have seen, without a constitutional amendment. To make that amendment would take three years. If the experiment should turn out to be an unfortunate one, it would take three years more to restore the constitutional provision.

There is one way, however, in which the experiment can most advantageously be tried, and at the same time, without any possibility of mischief, settle a question which, in my mind, will be determinative whether women should have the ballot, and that is whether the majority of women of this Commonwealth desire to vote. This is avowed on the one side, and denied on the other; but certain it is, if the great body of intelligent women of the Commonwealth desire to vote they will have the vote, for I believe that fact being known, no just man would oppose it. I suggest, therefore, that a law be passed, allowing women to vote under the same regulations as men in municipal elections, which law shall take effect when it shall be accepted by a majority of the women voting at some general election.

Objection has been made that women do not desire to vote because it would be unpleasant to go into the ward-rooms and voting-places. To obviate that objection, and to get a full and fair expression of the women upon this question, whether they will accept and exercise the right of voting, I would suggest that the women above twenty-one should be registered, the place, by number, or other sufficient description of residence, forming a part of the registry, and that every woman may deposit her vote, indorsed with her name and place of residence in her own handwriting, in the post-office, or in some proper box provided for the purpose, addressed to the proper officers of election in the cities and towns where they reside, within ten days before such general election, at which time the officers of election may open, examine, and compare the ballots with the registry lists, and assort, count, and declare the votes as in other cases.

Other recommendations are, that election-day be made a legal holiday, and that the power



to naturalize foreigners be not restricted to the Supreme and Superior Courts. He also remarks:

1. There are very many more officers and salaried agents and employés in the Commonwealth than are necessary to do its business.

2. They are paid, on an average, quite one half more than the salaries for which competent persons could be obtained to do the same work, or which are paid in other like business by employers in the State.

After reviewing the subject of education, he says:

The deductions which I make from these facts are:

1. That we have schools for special classes which draw from our general school funds, which should be for the use of all alike, by far too much.

2. That the salaries of the principals in most of the higher schools, teachers, and supervisors are very much more than they ought to be. Or, to use other words to express my meaning, higher than other like business pays, and higher than the sum for which equally good services could be, and are, obtained. As a rule, salaries do rise, but rarely or never lower; and the larger the salaries the more surely this rule works.

But this is not true of the teachers in the lower grades, of whom more than 84 per cent are women, whose salaries, in comparison, are by far too low, being, as we have seen, only 44 per cent of the salaries of men. I believe that the best teachers are wanted for the lower grade schools, and that a woman who can teach successfully such schools does the most service to the State, and ought to be correspondingly paid therefor.

Not till after the children of the whole people are furnished with opportunities to have the rudiments at least of an education, such as will best fit them for the positions they must occupy—and the statistics show that 91 + per cent of them have gone from school to their avocations in life at the age of fifteen—should the higher branches of education be given to any, and when given, equally to all, only so far as they can be afforded within the limits of proper, nay, generous taxation.

To state my views in another phrase: as a prevention of pauperism and crime, to fit our people for suffrage, use all the educational force of the State, educate the masses up to a certain necessary point. The classes above will and ought to educate themselves up to a still higher point.

Do not take the common fund and give it to the few, or have it expended in such a manner that all can not equally enjoy its advantages, and, above all, have that expenditure an economical one, and not pay low salaries to the teachers of the many, and high salaries to the teachers of the few.

Restrict the branches taught in the primary schools by law specifically to spelling, reading, writing, grammar, arithmetic, geography, history—preferably of the United States—and require that those shall be taught upon the same system, to the same grade of scholars, in every common school in the Commonwealth. When the scholar can show by an examination that he is well grounded in the elementary English branches, then let him be admitted to a school of higher grade, where line-drawing for industrial purposes shall be taught, book-keeping, algebra, geometry, the rudiments of the Latin and French languages, chemistry, physics, with natural philosophy in a rudimentary degree; and there a common-school education should stop.

**PARTY CONVENTIONS.**—Early in August the Prohibition State Convention was held in Boston, thirty-nine cities and towns being represented by one hundred and fifty-five delegates. The following nominations were made:

For Governor, Charles Almy, of New Bedford; Lieutenant-Governor, John Blackmer, of Springfield; Secretary of State, Solomon F. Root, of Douglas; Treasurer and Receiver-General, T. J. Lothrop, of Taunton; Auditor, Jonathan Buck, of Harwich; Attorney-General, Samuel M. Fairfield, of Malden.

The platform adopted is as follows:

*Resolved*, "That at no time in the history of prohibition has there been more genuine cause for rejoicing at the awakening of the public conscience respecting the enormous evils of the liquor-traffic, as indicated by the multiplicity of expedients resorted to in efforts to render the business less desreputable.

*Resolved*, That any party, however honored in the past, if it have no longer a leading issue to present and have done its work, has no longer a claim upon the suffrages of the people, and has no right to live; according to precedent it ought to be superseded.

*Resolved*, That every party ought to be judged by the soundness, the magnitude, and the moral weight of its principles, and its honest purpose to apply them faithfully to the wants of society.

*Resolved*, That we challenge the naming of any issue so grand in its moral significance, or so demonstrably practical in its relation to the deepest wants of our Commonwealth and our nation, as that which constitutes the central principle of our party platform.

*Resolved*, That the royal right of suffrage, the sacred ballot, ought not upon futile pretext any longer to be directed to channels where no issue is and no moral principle pertaining to our cause holds sway, but should, in the hands of men and women, by direct methods give expression to solemn protest against the wrong and advocacy of the right.

*Resolved*, That an intelligent review of the past fifteen years should satisfy every lover of the cause of prohibition that State officers, however excellent in reputation and professed principle (though they serve as a decoy for the votes of temperance men), can not be relied upon for securing temperance legislation in a party that handles our cause as a matter of policy.

Later in the same month the Greenback State Convention met in the same city, and nominated Benjamin F. Butler for Governor, with a full State ticket.

The Democratic State Convention met likewise in Boston on the 19th of September, and nominated the following ticket: For Governor, Benjamin F. Butler, of Lowell; Lieutenant-Governor, Samuel W. Bowerman, of Pittsfield; Secretary of State, David N. Skillings, of Winchester; Treasurer, William A. Hodges, of Quincy; Auditor, John B. Sweeney, of Lawrence; Attorney-General, George F. Verry, of Worcester.

It put forth the following platform:

The Democrats of Massachusetts, in convention assembled, believing that the time has fully come when many needed reforms of government should be boldly undertaken, invite the co-operation of all liberal and progressive citizens in the good work of initiating a new political departure, alike in the State and in the nation, that shall resolutely discard dead issues and courageously grapple with the live issues that have too long been postponed, and we offer to them, as a platform worthy of their acceptance and support, the following declaration of principles. We assert—

1. The supremacy of the nation, within constitutional limits, and the integrity of the State—an indissoluble Union of indestructible States. The Constitution and all its amendments strictly construed and loyally obeyed form the basis and safeguard alike and equally of the just authority of the Federal Govern-



ment, and of the legitimate exercise of local government in the several States of the Union—by which we form a sovereign nation of inviolate and inviolable States.

2. Equal rights, equal powers, equal burdens, equal privileges, and equal protection by law under the government for every citizen of the republic, without limitation of race, or sex, or property qualification, whether it be by a tax on property or a poll-tax on persons.

3. Impartial freedom of the ballot—North as well as South, East as well as West—and the abolition of all laws, whether on the statute-books of Massachusetts or of Mississippi, aimed at the unequal limitation of the right of suffrage and the partial withholding of the sacred and fundamental right of representation.

4. Honest and economic expenditures of the public money in State and nation, and in such ways and for such purposes only as are manifestly essential to the public welfare, demanded by public necessity and clearly sanctioned by constitutional authority. . . .

7. A thorough and immediate reform of the tariff. The Constitution of the United States sanctions taxation, whether by excise, impost, or customs, to the amount of the necessary expenditures of the Government, whether in war or peace, to which all its revenues must be limited. The national expenditures are now so great that all proper protection can be given to American interests, American industries, and American labor within those limits. Therefore, we call upon Congress so to reform the present war taxes that hundreds of millions may not be, as now, needlessly extracted from the earnings of our people, to lie in the Treasury as a temptation to wicked and reckless appropriations for extravagant public buildings and useless and wasteful river and harbor bills. That no taxes shall be levied upon the necessities of life or upon the raw material which is not found or produced in our country. That the tariff shall be so judiciously adjusted that American commerce shall be fostered, and, above all, American labor elevated and amply rewarded. We affirm that all these results can be fully realized under a tariff limited in amount to a sum necessary and adequate for revenue.

8. Reduction of extravagant State expenditures with the direct taxation necessary to sustain them—which, under the continuous rule of one party in power for more than seventeen years since the war, has steadily increased year by year, until in the year 1881, by direct taxation, the enormous sum of five millions three hundred and forty-three thousand eight hundred and eighty-four dollars and twenty-five cents (\$5,343,884.25) has been drawn from the earnings of the people of the State, in addition to a State tax of one million and five hundred thousand dollars (\$1,500,000); and in the year 1882, by the addition of a half million (\$500,000) to one of the direct State taxes, the vast sum of seven millions three hundred and forty-three thousand eight hundred and eighty-four dollars and twenty-five cents (\$7,343,884.25) is imposed upon the people of this State, or more than four dollars to each man, woman, and child in the Commonwealth. We require, therefore, amendments of the laws by which this immense burden shall be reduced; and, further, that all taxation shall be so levied that a large portion of the property of the Commonwealth shall not escape taxation for the benefit of the few and the wrong of the many; and that all taxation shall be an equal burden upon all men.

9. No sumptuary laws, infringing sacred rights of personal liberty. No double nor any unequal taxation. No partial enforcement of the laws. No class legislation. These are axioms of Democracy, dominant always in its faith and practice. In this day of giant monopolies, powerful corporations, and concentrated wealth seeking to subsidize every function of Government to their own exclusive benefit, the Democrats of Massachusetts proclaim their principles anew, in behalf of labor and all its interests, in behalf of the laboring masses and all their rights, to the end

that this Government may be and may continue to be the "people's government," as the fathers of the republic designed and intended.

The Republican State Convention assembled in Worcester on the 20th of September, 21 cities and 328 towns being represented by 1,287 delegates. Only three towns were unrepresented. The following is the ticket nominated: For Governor, Robert R. Bishop, of Newton; for Lieutenant-Governor, Oliver Ames, of Easton; for Secretary, Henry B. Peirce, of Abington; for Treasurer, Daniel A. Gleason, of Medford; for Auditor, Charles R. Ladd, of Springfield; for Attorney-General, Edgar J. Sherman, of Lawrence.

The following resolutions with others were adopted as the platform of the Republican party of the State:

We congratulate the country that a sound business and financial policy in national legislation has secured an extension of the present excellent banking system, giving to the people a currency convenient, uniform, elastic in volume, of equal value in all the States, and absolutely safe from loss in the hands of the holder.

We unqualifiedly condemn all dishonesty and fraud in the conduct of elections, and demand that in every locality in the United States a free ballot and a fair count shall be absolutely secured to every qualified voter. The work of the Republican party can not cease till that result is accomplished, and to no other party can so high a duty be safely intrusted. We, therefore, express our admiration of the resolute action of the Republicans of the national House of Representatives in the decision of election cases, despite the factious and indefensible resistance of the Democratic party in its not unusual encouragement of tissue-ballot and other frauds.

By the rapid payment of the national debt and the great reduction in annual interest charges, made by honest and able management of the finances (results unprecedented in the history of the world), and by reason of the consequent restoration of confidence and revival of business, a large surplus is accumulating in the Treasury, above all possible requirements for the defrayal of ordinary expenses, for discharge of the matured debt and interest, and for the liberal disbursements to pensioners. It is clearly the duty of Congress to act speedily to reduce taxation in all its forms, and so to lighten the burdens of the people. More revenue than is needed for the public uses the Government should not take. An overflowing Treasury offers tempting inducement and plausible excuse for inordinate expenditure. To accomplish such reduction we believe in a prompt revision of the tariff, but we insist that in that revision the principle of discrimination for the protection and encouragement of American industries and labor shall be adhered to, and such an adjustment of details made that relief shall come where most needed, and the important interests involved be not recklessly disturbed.

We urge upon the favorable consideration of Congress such measures as shall be necessary to keep coin and currency at par with gold, the standard of the commercial world, and to bring the silver dollar to an equivalency in value with the gold coinage; to increase American commerce and encourage American shipping and ship-building, and to secure a more extended market for the products of our industries; to provide, and within proper limitations, in support of the common-school system throughout the country; to inaugurate and continue a wise, just, and humane policy toward the Indians; to vindicate the rights of American citizenship in all parts of the Union.

The work of reforming the civil service which was commenced by the Republican party, and in favor of which it alone stands committed in declaration and in



any measure of practice, is becoming more generally recognized as of paramount importance and essential to the security and permanence of our institutions. While indiscriminate censure of our civil servants is flagrantly unjust, the evils inseparable from the present system are confessedly grave. Merit, not patronage, must be the basis of official tenure. As initiatory to a complete remedy, we earnestly demand such legislation concerning the subordinate offices as shall embrace the following provisions:

1. Appointments shall be made only upon open, impartial, practical tests of the fitness of applicants, giving due preference to persons disabled in the military or naval service of the country.

2. No removals shall be made without cause, or for partisan reasons, or for failure to perform partisan service.

3. Superior qualifications and real merit demonstrated in the actual performance of duty shall constitute the best title to continuance and promotion in office.

We unhesitatingly disapprove of any system of political assessments or demands for contributions under an express or implied threat of removal from office as a penalty for non-compliance, or under any other pretext whatever. The salary of the officeholder is his compensation for services, not a fund subject to draft for party uses. And we go further. Free government can be maintained only when the convictions and choice of the voter find expression in his ballot, uncontrolled by fear or purchase. We view with serious apprehension the growing tendency of the times toward corrupting expenditures of money to control nominations and elections to the public offices. The peril to our institutions is extreme. Open bribery in legislative halls is not more dangerous or culpable. Reform, prompt and thorough, is demanded by every consideration of safety.

Recalling with satisfaction the salutary enactments of the State Legislature for the reformation of the election laws, for the security of the rights of every legal voter, for humane assistance to the needy poor, for a more equitable adjustment of the burdens of taxation, for protection to the interests of the laborer, and for the advancement of the material, moral, social, and educational interests of the Commonwealth, we invite intelligent and candid consideration of all propositions in aid of temperance and good order, for equal rights of suffrage irrespective of sex, and for the encouragement of industry, frugality, contentment, and prosperity among all the people of our honored State.

**ELECTION RETURNS.**—The election in November resulted in the choice of General Butler for Governor, and of the remainder of the Republican State ticket. The vote was as follows:

**GOVERNOR.**

Benjamin F. Butler, of Lowell.....	188,946
Robert R. Bishop, of Newton.....	119,997
Charles Amy, of New Bedford.....	2,187
All others.....	198

**LIEUTENANT-GOVERNOR.**

Oliver Ames, of Easton.....	184,958
Samuel W. Bowerman, of Pittsfield.....	116,678
George Dutton, of Springfield.....	4,083
John Blackmer, of Springfield.....	2,141
All others.....	56

**SECRETARY OF STATE.**

Henry B. Peirce, of Abington.....	186,818
David N. Skillings, of Winchester.....	110,941
John P. Sweeney, of Lawrence.....	4,203
John Howe, of Worcester.....	4,147
Solomon F. Root, of Douglas.....	2,185
All others.....	19

**TREASURER.**

Daniel A. Gleason, of Medford.....	186,886
William A. Hodges, of Quincy.....	115,487
George Foster, of Lynn.....	4,157
Thomas J. Lothrop, of Taunton.....	2,158
All others.....	88

**AUDITOR.**

Charles R. Ladd, of Springfield.....	186,896
John P. Sweeney, of Lawrence.....	111,244
David N. Skillings, of Winchester.....	4,295
Augustus L. Merchant, of Leverett.....	4,108
Jonathan Buck, of Harwich.....	2,129
All others.....	82

**ATTORNEY-GENERAL.**

Edgar J. Sherman, of Lawrence.....	187,008
George F. Verry, of Worcester.....	114,458
Elmer A. Snow, of Athol.....	4,265
Samuel M. Fairfield, of Malden.....	2,098
All others.....	48

Of the eight members of the Executive Council, seven are Republicans and one (from Boston) a Democrat. Democrats were elected to Congress in the fourth, fifth, and sixth districts, an independent Republican in the ninth, and Republicans in the other eight. The vote was as follows:

**FIRST DISTRICT.**

Robert T. Davis, of Fall River.....	11,475
Nicholas Hathaway, of Fall River.....	5,581
George F. Babbitt, of Provincetown.....	229
Prelate D. Conant, of Fall River.....	62
Francis D. Cobb, of Barnstable.....	42
All others.....	9

**SECOND DISTRICT.**

John D. Long, of Hingham.....	12,915
Edgar E. Dean, of Brockton.....	10,152
John W. Willett, of Taunton.....	545
George E. Donham, of Rockland.....	888
All others.....	3

**THIRD DISTRICT.**

Ambrose A. Ranney, of Boston.....	11,968
Horatio E. Swasey, of Boston.....	8,550
Samuel B. Capen, of Boston.....	91
Patrick A. Collins, of Boston.....	74
Nicholas Furlong, of Boston.....	28
All others.....	20

**FOURTH DISTRICT.**

Patrick A. Collins, of Boston.....	12,884
Charles T. Gallagher, of Boston.....	4,546
Wendell Phillips, of Boston.....	123
T. C. Brophy, of Boston.....	70
All others.....	15

**FIFTH DISTRICT.**

Leopold Morse, of Boston.....	11,801
Selwyn Z. Bowman, of Somerville.....	8,792
Amos Cummings, of Woburn.....	82
All others.....	48

**SIXTH DISTRICT.**

Henry B. Lovering, of Lynn.....	12,840
Elisha S. Converse, of Malden.....	11,961
All others.....	9

**SEVENTH DISTRICT.**

Eben F. Stone, of Newburyport.....	10,056
Charles P. Thomson, of Gloucester.....	8,764
Eben Moody Boynton, of Newburyport.....	8,825
J. Newton Emery, of Beverly.....	50
All others.....	26

**EIGHTH DISTRICT.**

William A. Russell, of Lawrence.....	11,269
Charles S. Lilley, of Lowell.....	10,743
Charles E. Cox, of Lunenburg.....	85
All others.....	8

**NINTH DISTRICT.**

Theodore Lyman, of Brookline.....	12,076
John W. Candler, of Brookline.....	9,703
George W. Stacy, of Milford.....	206
Prescott West, of Marlboro.....	186
All others.....	10

**TENTH DISTRICT.**

William W. Rice, of Worcester.....	11,846
John Hopkins, of Millbury.....	9,404
Jason Waters, of Sutton.....	95
All others.....	2

## ELEVENTH DISTRICT.

William Whiting, of Holyoke.....	14,485
Edward J. Sawyer, of Gardner.....	7,602
Warner Johnson, of Athol.....	802
Oscar Edwards, of Northampton.....	168
All others.....	22

## TWELFTH DISTRICT.

George D. Robinson, of Chicopee.....	11,294
Benben Noble, of Westfield.....	9,839
All others.....	25

The Legislature chosen at this election will consist of 22 Republicans and 17 Democrats in the Senate (there being one vacancy), and 140 Republicans and 90 Democrats in the House (there being two vacancies).

**PROHIBITORY AMENDMENT.**—A convention of persons interested in temperance work, irrespective of party or sect, to agitate in favor of an amendment to the Constitution prohibiting the manufacture and sale of intoxicating liquors, was held in Boston on the 28th of September. The following resolutions embody its action:

In view of the fact that the liquor-traffic still continues to be the most fruitful source of crime, misery, pauperism, and taxation in the State, and license is wrong in principle and a failure in action,

*Resolved*, That the manufacture and sale of alcoholic liquors ought to be prohibited by law. That the Constitution of the State ought to be so amended as to prohibit such manufacture and sale within the Commonwealth. That we continue to demand at the hands of the Legislature the submission to the popular vote of the people at the ballot-box of an amendment to the Constitution of the State forever prohibiting the manufacture and sale of alcoholic liquors.

That we recommend to the friends of temperance throughout the State to carefully ascertain how the candidates of the various parties stand upon the question of submission of a constitutional amendment, forever prohibiting the manufacture and sale of alcoholic liquors as a beverage, to a vote of the people, and to vote only for such candidates as will favor such submission.

That we pledge ourselves to call a ministerial convention in favor of such submission to the people.

That we pledge ourselves to call conventions in the large cities and towns in aid of the same.

That we pledge ourselves to circulate petitions among the people and to present them to the General Court in aid of the same.

That the present committee, with needed additions, be made a permanent working committee in aid of the same.

**MISCELLANEOUS.**—In February a destructive fire occurred in Haverhill. The pecuniary loss was about \$2,000,000; the insurance amounted to nearly \$1,800,000; the territory burned over covered an area of from five to ten acres; about sixty buildings in the best part of the city were destroyed; 159 firms, including nearly every shoe-manufacturing concern in the city, two national banks and one savings-bank, were burned out, and between 2,000 and 2,500 persons were thrown out of employment.

On the 12th of October a celebration was held in Marshfield, in honor of the one-hundredth anniversary of the birth of Daniel Webster, which occurred in January.

**MERCHANT MARINE OF THE UNITED STATES.** The decadence of the shipping interests of the United States has attracted an unusual degree of attention during the year, and

aroused the people and Congress to efforts for the discovery of its causes and the provision of a remedy. Since the year 1855 or thereabout, there has been a progressive decline in the tonnage of American vessels engaged in foreign trade, and in the business of building and equipping sea-going ships. The carrying-trade of the country has in that time passed almost wholly into foreign hands. The aggregate tonnage of American shipping of every class in 1861—registered and enrolled, sail and steam, employed upon the ocean, the lakes and rivers, and about the harbors of the country—was 5,539,813 tons. In 1881 it had declined to 4,057,734, a decrease of 27 per cent. The decline in tonnage employed in foreign trade only, during the same period, was from 2,496,894 to 1,335,586, a decrease of 54 per cent. The loss of ground in ship-building is still more striking. In the year 1855 there were constructed of vessels of all descriptions in the United States, 583,450 tons. In 1861 the amount had fallen to 233,194 tons, and in 1880 it was only 157,409 tons. This period covers a time during which the foreign trade of the country has largely increased. The total of American imports and exports in 1855 was \$536,625,366, and over 75½ per cent of the amount was carried in American vessels. In 1860 the whole trade amounted to \$762,288,550, of which 66½ per cent was carried on by American shipping. In 1881 the total volume of imports and exports of the United States had increased to \$1,676,636,000, but of this amount only 16 per cent was carried in American vessels, and the percentage was still lower in 1882. While the marine of the United States was thus sinking into insignificance, that of other countries was making corresponding gains. The tonnage of British vessels engaged in trade rose from 935,000 in 1856 to 7,903,000 in 1880; that of Germany increased during the same period from 166,000 to 1,089,000; that of Sweden and Norway from 20,662 to 1,234,000. The gain of other countries was only less marked. The following table shows the variation in the volume of the foreign trade of the United States from 1840 down to 1882, and in the percentage carried in American vessels:

YEAR.	Total imports and exports.	Percentage carried in American vessels.
1840.....	\$289,227,465	82·9
1841.....	449,797,980	88·8
1842.....	204,858,621	82·8
1843.....	149,100,279	77·1
1844.....	219,687,081	78·6
1845.....	231,901,170	81·7
1846.....	285,180,818	81·7
1847.....	304,867,460	71·1
1848.....	309,031,059	77·4
1849.....	298,618,259	75·2
1850.....	880,037,083	72·5
1851.....	434,612,948	72·7
1852.....	417,955,217	70·5
1853.....	498,954,804	69·5
1854.....	577,290,414	70·5
1855.....	536,625,366	75·6
1856.....	641,004,850	75·2
1857.....	728,850,828	70·5



YEAR.	Total imports and exports.	Percentage carried in American vessels.
1859.....	607,257,571	73.7
1859.....	695,557,592	66.9
1860.....	762,288,550	66.5
1861.....	584,995,066	65.2
1862.....	485,710,714	50.0
1863.....	584,928,502	41.4
1864.....	669,855,085	27.5
1865.....	604,412,996	27.7
1866.....	1,010,988,552	32.2
1867.....	877,020,391	33.9
1868.....	848,527,647	35.1
1869.....	876,448,754	38.1
1870.....	991,896,889	35.6
1871.....	1,192,472,258	31.2
1872.....	1,212,828,238	28.5
1873.....	1,840,899,221	25.8
1874.....	1,312,680,640	26.7
1875.....	1,219,484,544	25.8
1876.....	1,142,904,812	38.1
1877.....	1,194,045,627	26.5
1878.....	1,210,519,899	25.9
1879.....	1,202,708,609	22.6
1880.....	1,618,770,638	17.4
1881.....	1,675,024,818	16.0
1882.....	1,567,071,700	15.5

The following statement shows the tonnage of American and foreign vessels entered at ports of the United States from foreign countries during the years 1871 to 1881 inclusive:

YEAR.	Foreign.	American.	Total.
1871.....	4,890,606	2,608,591	6,994,197
1872.....	5,185,340	2,584,646	7,769,986
1873.....	7,951,464	2,448,285	8,894,749
1874.....	7,094,718	2,914,942	10,009,655
1875.....	6,255,985	2,887,158	9,143,188
1876.....	6,788,124	2,927,780	9,715,904
1877.....	7,448,697	2,957,791	10,406,488
1878.....	8,521,090	3,009,487	11,530,527
1879.....	10,715,394	3,049,748	13,768,137
1880.....	12,111,160	3,140,169	15,251,329
1881.....	12,711,965	2,919,149	15,680,541
Total.....	87,176,965	31,437,686	118,614,651

The following shows at a glance by periods of five years the decline in American shipping, the increase in foreign commerce, and the transfer of the carrying-trade from American to foreign vessels:

YEAR.	Tonnage in foreign trade.	Value of exports and imports.	Per cent carried in American vessels.	Per cent carried in foreign vessels.
1840.....	762,898	\$281,227,465	82.9	17.1
1845.....	904,476	281,901,170	81.7	18.3
1850.....	1,489,694	390,087,098	72.5	27.5
1855.....	2,348,353	586,025,866	75.6	24.4
1860.....	2,378,396	762,288,550	66.5	33.5
1865.....	1,518,350	604,412,996	27.7	62.8
1870.....	1,448,846	991,896,889	35.6	64.4
1875.....	1,515,998	1,219,484,544	25.8	74.2
1880.....	1,814,402	1,618,770,638	17.4	82.6
1881.....	1,297,085	1,675,024,818	16.0	84.0
1882.....	1,259,492	1,567,071,700	15.5	84.5

THE COASTWISE TRADE.—During the same period American shipping engaged in the coastwise trade, which is protected from foreign competition, increased from 1,172,694 to 2,873,638 tons. A striking illustration of the almost complete transfer of the American carrying-trade to foreign hands, appears in the fact that, of the 72,276,000 bushels of

grain exported in 1881, not a single bushel was transported in an American vessel. Over 62 per cent of the entire shipment was taken in British vessels; Italy held the second place, taking over 5,000,000 bushels; Belgium was third on the list, Norway fourth, Germany fifth, and Austria sixth. In 1861 the tonnage of the United States and Great Britain of all classes was approximately equal—5,529,000 for the former and 5,895,000 for the latter. In 1881 the aggregate tonnage for the United States was 4,657,784, but of this 1,057,450 was engaged on the Northern lakes and the Western rivers, 442,000 was of canal-boats and barges, and 64,947 was of licensed vessels under twenty tons. The tonnage engaged in foreign trade was only 1,335,000. The officially registered tonnage of Great Britain, on the other hand, was 6,574,413 in 1880, while it was estimated that the aggregate tonnage of mercantile marine under the British flag was fully double that amount. Of the steam marine of the world, Great Britain was said to own in 1880 63 per cent, registering 5,247 vessels of 2,723,468 aggregate tonnage. The United States, on the other hand, had only 146,604 tons of steam-vessels engaged in foreign commerce.

BUILDING OF VESSELS.—The total of iron vessels built in the United States in six years, from 1876 to 1881 inclusive, was 127,298 tons, and this was for use almost wholly in the coasting-trade, from which foreign vessels are excluded. In Great Britain the iron vessels built during those six years had a capacity of over 2,000,000 tons. The amount constructed in 1881 alone exceeded 600,000 tons, and there were under construction on the last day of that year, 515 steamers of an aggregate capacity of 958,377 tons, and 127 sailing-vessels, of 130,440 tonnage. Meantime there has been a marked increase in the carrying-trade and ship-building of Germany.

The incidental losses of the decline of the American merchant marine are variously estimated. The amount of capital expended in the construction and repair of vessels in the United States in 1855 is stated at \$50,000,000 to \$60,000,000, while in 1881 it was less than half the amount.

FREIGHTS EARNED.—The amount paid in freight charges on exports from the United States in 1879 is said to be \$88,000,000, and on imports \$45,000,000, or \$133,000,000 in all. Of this, fully five-sixths went to the owners of foreign vessels. One writer assumes \$100,000,000 to be a safe and moderate estimate of "the loss which the business and national wealth of the country at present annually sustains by reason of the decay of our industries of ship-building, ship-repairing, and ship-using in foreign commerce," and says that this loss is "nearly equivalent to all the capital invested in all the blast-furnaces of the United States in 1880; to more than one third of the value of the present annual products of all the iron and steel industries of the country; and

to more than 50 per cent of the value of all the products of our cotton manufactures, as returned by the census of 1880." But, he adds, the direct losses are "insignificant in comparison with the indirect losses due to the loss of trade from an inability to make exchanges promptly, regularly, and cheaply with foreign countries."

**CAUSES OF THE DECLINE.**—A study of the causes of the decadence of American shipping shows that its beginning was practically contemporaneous with the introduction of steam in place of sail as a propelling power, and of iron or steel in place of wood as the chief material of construction. Wooden sailing-vessels were made more cheaply in the United States than in any other maritime country, and as a consequence the greatest skill and perfection were attained not only in their construction but in their use. About 1855, when American shipping interests were at their highest stage of prosperity, the tonnage of the country was more than 50 per cent in excess of the needs of the entire carrying-trade in its exports and imports, which shows that it was largely and profitably engaged in carrying commodities for other countries. Moreover, a large amount of tonnage was built each year for sale in foreign markets. This construction for foreign account amounted in 1855 to 65,000 tons. In 1856 it had fallen to 42,000, in 1858 to 26,000, and in 1860 to 17,000. The first steam-vessels were built in Great Britain in 1838, but the growth of this interest was slow at first. The total British steam tonnage engaged in foreign trade in 1851 was 65,921 tons. A beginning in this direction was made in the United States in 1848, when it acquired 16,000 tons of steam shipping. Its increase at first was comparatively rapid, and in 1851 it amounted to 62,390 tons. The advance continued until 1855, when American steam shipping amounted to 115,000 tons. From that time a retrograde movement set in, and the steam tonnage of the United States was less in 1862 than seven years before. The civil war which intervened accelerated the decline, and prevented attention from being devoted to the subject, which might possibly have given a different direction to events. American commerce was, in a measure, driven from the seas by Confederate cruisers and their allies, and American shipping was sold to foreigners on account of the special risks to which its use was subjected. Attention was turned away from ship-building for commercial purposes, and from the fostering of commercial interests in general, and the heavy burdens imposed upon the country in order to raise war revenues had the effect of restricting foreign intercourse and trade. Accordingly, when the war was over, the American merchant marine was well-nigh destroyed. The wooden sailing-vessels had largely disappeared, there had been no increase of steam tonnage, and the slight revival which followed the return of peace affected the coasting-trade mainly, if not wholly. In 1869 the

steam tonnage was 221,939, but in the twelve years following it dwindled to 145,604. Meantime the building of iron steam-vessels had been developing to enormous proportions in Great Britain, and that country had gradually secured the bulk of the carrying-trade of the Atlantic. Some of her mail-steamship lines to remote colonies and to distant parts of the globe, in which the British Empire had possessions or large interests, were developed by the aid of liberal compensation for mail service under special contracts. While the British marine and commercial interests had acquired such overshadowing proportions, and those of the United States had sunk into such insignificance, in the ten or fifteen years following 1855, it was soon found that continued peace and internal prosperity produced no symptoms of recovery on the part of the latter country. On the contrary, the decline continued. It speedily became evident that the primary cause of this state of things was the fact that under existing conditions iron vessels could be more cheaply built in Great Britain than in the United States. The difference has been variously stated at from \$10 to \$15 per ton for iron sailing-vessels, and \$25 to \$35 per ton for iron steam-vessels. But it was also found that many burdens were laid upon American shipping by the laws of the country which would prevent development even if ships could be economically built. There were many antiquated restrictions in the navigation acts, heavy port charges, tonnage dues and consular fees, not to mention State and municipal taxation, which placed American shipping at a disadvantage in competition with that of other countries. Americans were not permitted to buy ships abroad and have them registered in the foreign trade, the materials used in their construction were subject to heavy duties if imported, domestic materials and labor for one reason or another bore a high price, and it was no wonder that ships were neither built nor used to any extent by the United States in foreign commerce. The only chance for development was in the coasting-trade, from which foreign competition was excluded by law.

**THE REMEDY.**—The remedy for this deplorable state of things has been a subject of thought and discussion to an increasing extent for some years. Private citizens and public bodies have given it their attention, until it has been forced to the position of a pressing question. Near the beginning of this year the New York Chamber of Commerce considered the report of a special committee on the subject. Among the suggestions of that committee were the following:

1. The repeal of the existing law of Congress which requires the payment of three months' wages to all seamen discharged in foreign ports. This law was declared to be unjust, not called for by any other nation, and now not applicable, as it was originally intended to protect American seamen, the law requiring American vessels to have only American sailors having been repealed. In addition, the facilities of trans-



portation are so much greater now than in olden times. The period of three months, then deemed a reasonable time to allow for the sailor's reaching home, is not at all required at this age of steam.

2. The repeal of the law obliging all American vessels to transport wrecked sailors for a uniform price of \$10 each, regardless of cost or of distance to be traveled. The committee recommended that the rate of compensation be made 50 cents per day for the time taken in passage.

3. A more liberal law in regard to the admeasurement of vessels.

4. That the existing requirements of the laws of the United States as to life-saving apparatus and other fitting of vessels shall be made uniform with foreign vessels, and either our own reduced to their level, or all such coming to the United States be required to conform to our laws.

5. That the existing law requiring the transportation of mails for a sum not exceeding the postage received be repealed, and the Postmaster-General be authorized to apply a general law to all postal service, and compensate the service at sea "*quantum meruit*," the same as on land.

6. The exemption from all national, State, and municipal taxes of ship property engaged in foreign trade and to and from Pacific ports.

7. The limitation of a ship-owner's individual liability, under all circumstances, to the proportion of debts and liabilities that his individual share of the vessel represents to the whole.

8. The abolition of all fees charged to vessels for consular services; the payment of proper salaries to consuls, so that extortions may not be levied upon ships.

9. The establishment by the Government of bonded warehouses, from which all vessels engaged in foreign trade, or to and from Pacific ports, may withdraw all goods, stores, and supplies of a foreign production and manufacture, free of duty, the same as is permitted in Great Britain.

10. That all foreign materials, of every kind and character, entering into the construction and repair of vessels, be made duty free.

The committee also advocated government aid by means of subsidies to steamship lines. It said:

"It is found that Great Britain, with a keen perception of the incalculable advantage and benefit it is to her people to attain the supremacy of the ocean, has led up to it by a system of subsidies, and it is well known and authenticated that for many years that country has not only aided in its development, but maintained the existence of its commercial lines by a system of subsidies. Were we to follow in her footsteps, it can not be supposed that she will now retrace her path. And, therefore, any action in this line must be made with the foreknown and anticipated fact that she will then, in all probability, increase hers again to our detriment. Still we are of opinion that in Great Britain there is a tendency to oppose this system of subsidies, and your committee do not hesitate to recommend that our Government do, by some system of bounty or otherwise, afford material aid and inducement to the creation of a mercantile marine." Further considering the same subject, the committee takes occasion to say: "Whether it be practicable to build a class of vessels adapted to the carrying-trade, and convertible, by additions, into war-cruisers, the experts of the navy and ship-building interest can best determine. Your committee believe they can be constructed, and if so, no more prompt or efficient means could be adopted than for the Government to extend such aid in the construction of a series of such vessels as would bring about their immediate construction and the establishment of a number of lines to important foreign points, and thus supply the most serious defect in time of war, and afford additional markets for our productions. Your committee also

recommend a bounty to encourage the building of wooden vessels."

**INVESTIGATING COMMITTEE.**—Near the close of the first session of the Forty-seventh Congress, the Hon. Perry Belmont, of New York, proposed in the House of Representatives that a special joint committee of the two Houses make an investigation of the condition and needs of American shipping interests, and report at the beginning of the next session. The joint resolution directing the investigation was adopted, and Messrs. Warner Miller, of New York; O. D. Conger, of Michigan; and G. G. Vest, of Missouri, were appointed members of the committee on the part of the Senate, and Messrs. Horace F. Page, of California; Nelson Dingley, of Maine; S. S. Cox, of New York; J. W. Candler, of Massachusetts; Robert Mc Lane, of Maryland; and George M. Robeson, of New Jersey, on the part of the House of Representatives. The committee met in New York not long after the adjournment of Congress, chose Senator Miller as chairman, and issued a circular containing the following questions, to which replies were solicited from those having knowledge of the subject or suggestions to offer:

1. Why can not this country build iron, steel, or wooden vessels as well and as cheaply as they are built in Scotland, England, or other countries?
2. If we had such vessels without cost to us, could they be run by us in competition with those of other countries who build their own vessels and run them with their own officers and crews, without a modification or repeal of existing laws?
3. What modifications of existing laws or what new laws are required to remove discriminations against and burdens upon our shipping and ship-owning interests, such as customs dues, port dues, consular charges, pilotage, tonnage, and other dues, etc.?
4. Compare the laws of other countries with our own with a view to their effect upon our and their shipping and ship-owning interests.
5. Should our navigation laws be repealed or modified, and, if modified, wherein and for what purpose?
6. What is the cost of the component materials of iron, steel, or wooden vessels in other countries and our own?
7. What would be the effect of a rebate on any or all such materials?
8. Present any other statements connected with the cause of the decline of the American foreign carrying-trade, and what remedies can be applied by legislation.

The committee met again in New York in November, to consider the replies received to these interrogatories, and to take oral testimony on the subject-matter of their inquiry. This testimony occupied several days, and came from ship-builders, merchants, experienced ship-masters, students of the question, and others. The committee prepared a bill for submission to Congress, which was agreed to by all the members, but two separate reports were made, and certain amendments to be offered to the bill at the proper time were prepared by the minority of the committee. The bill was reported simultaneously by Mr. Conger, in the Senate, and Mr. Dingley, in the House, on the 15th of December, and referred to the Committees on Commerce of the two

Houses. The minority report was submitted the same day, signed by Senator Vest and Representatives Cox and McLane.

**REPORT OF THE COMMITTEE.**—The general report of the committee to accompany the bill followed the next day, and bore the signatures of all the members. The bill, as reported, consisted of twenty-three sections, and was entitled "An act to remove certain burdens on the American merchant marine, to encourage the American foreign carrying-trade, and to amend the laws relating to the shipment and discharge of seamen." The first section makes some change in the law with reference to the registration of vessels, but restricts its benefits to those "wholly owned by citizens and to be commanded by a citizen of the United States." The second section strikes from the statutes the tax of fifty cents per ton on vessels, "any officer of which shall not be a citizen of the United States." The only important change made by these two sections was to limit the restrictions of the old law as to citizenship to the commanding officer instead of applying it to all officers. The third section modifies the provisions as to the discharge of seamen at foreign ports on their own application by consular officers of the United States. The payment of the wages due may be exacted, but, if the seaman is discharged on account of illness or inability to perform his duties, he is entitled only to the wages due; while, if he is discharged on account of any hurt received in the service of the vessel, or disease caused by improper or insufficient treatment, the master of the vessel must provide proper care for him until he recovers, dies, or is brought back to the United States. Section 4 abolishes the old requirement of three months' extra pay when a seaman is discharged at a foreign port upon the termination of his agreement, or when the vessel becomes stranded, wrecked, or unfit for further service. If the consular officer is satisfied that the master of the vessel has designedly continued the voyage beyond the term of the agreement with the seaman, he may require payment of one month's wages, unless the master finds employment for the seaman, or provides for his passage home. Section 5 requires that, in case a vessel is sold in a foreign country, the master shall pay to a consular officer of the United States one month's wages for all discharged seamen, or provide them with other employment, or else provide for their passage home. Section 6 provides for an examination by consuls into cases of desertion of sailors, and, when they are satisfied that it was caused by unusual or cruel treatment, they may require the payment of wages due, and of one month's extra wages, unless employment on some other vessel is provided, or means furnished for returning the deserter to his own country. The seventh and eighth sections make consuls responsible to seamen for wages and charges collected in their behalf, but permit the retention of the

amount necessary to pay the expenses which they may have incurred before shipping again. Section 9 requires the masters of American vessels bound to home-ports to take destitute seamen, on the request of consuls, at a charge not exceeding \$10 each; but, in case of long voyages, or peculiarly disabled condition of the seamen, there may be an extra allowance, not exceeding 30 cents a day, made by the collector of the port at which the vessel arrives. A penalty of \$100 is provided for any refusal of a master of a ship to take a destitute seaman home on the request of a consul, but no master shall be required to take more than two such seamen for every 100 tons burden of the vessel. Section 10 abolishes consular fees for certificates, manifests, or other official service to American vessels, or their owners, officers, or seamen, and provides for payment for the service out of the Treasury of the United States. Section 11 prohibits the payment of advance wages to any seaman, or to any person on his account. This prohibition is applied to foreign as well as American vessels employing seamen in United States ports, and is intended to do away with what is known as the exaction of "blood-money." The abuse at which it strikes is that of trusting sailors for board, and other expenses, and then obtaining employment for them from the masters of vessels, and securing reimbursement from advances on account of their wages. Section 12 requires each vessel to carry a slop-chest, with supplies of clothing, blankets, etc., which shall be sold to seamen at a profit not exceeding 25 per cent upon the reasonable wholesale price. Section 13 gives to masters and owners of vessels the right to ship and pay off men without the intervention of shipping commissioners or the payment of fees. Section 14 provides for the admission in bond, for use free of duty, of articles and materials used in the repair of vessels engaged in foreign trade, and of all ships' stores, cordage, rigging, canvas for sails, and coal to be used and consumed on such vessels. Section 15 abolishes tonnage dues and the requirement of consular certificates in the case of vessels trading with the Dominion of Canada. Section 16 reduces the assessment of 40 cents a month upon seamen for hospital dues to 20 cents a month. Section 17 limits the liability of individual ship-owners to the proportion of the ship's debts that each owner's share in the vessel bore to the whole, and the aggregate liability of all the owners to the value of the vessel. Sections 18 and 19 are as follow:

**SECTION 18.** That when any vessel, whether steam or sail, shall be constructed and equipped in the United States for the foreign trade, including the trade between the Atlantic and the Pacific ports of the United States, in whole or in part, of materials of the production of the United States, the owner or owners of such vessel shall be entitled to receive and collect from the United States a drawback or sum equal in amount to the duty which would have been collected upon imported materials of like description and of equal qual-



ity with the American materials used in the construction, equipment, engines, boiler, and other appurtenances of such steam or sail vessel; provided that in ascertaining such drawback the duties on such iron or steel shall be computed on iron and steel advanced in manufacture not beyond the point of plates, angles, bars, and rods; and provided further that this section shall apply only to vessels commenced after the passage of this act.

Sec. 19. That such sums shall be paid in the same manner and from the same funds as drawbacks on customs duties and under such regulations as may be adopted from time to time by the Secretary of the Treasury, and shall be regulated and the amount thereof determined prior to the registry of such ship or vessel.

Section 20 provided for a new form of registry certificate. Section 21 allowed a drawback of duties on foreign materials used in the construction of vessels for foreign account. Section 22 exempted all vessels employed in foreign trade from state and municipal taxation; and section 23 simply repealed conflicting legislation.

The report of the full committee which accompanied this bill briefly reviewed the condition of American shipping and the difficulties with which it was beset, and justified the provisions recommended for its relief. In regard to the drawback on materials provided for in section 18, the committee gave the following illustration of its intended effect:

For the purpose of illustrating what would be the practical working of the foregoing plan, we have obtained from the Delaware River Iron Ship-building and Engine-Works a schedule of the materials actually used in constructing two first-class passenger and freight steamships for the Pacific trade of 2,181 tons each, having a speed of thirteen knots. It appears that 3,709,845 pounds of iron, mainly in the form of plates, angles, and bars, were used in the construction of the hull, engines, boilers, etc., of each steamship. The duty on iron, if imported in these forms, would average under the present tariff about 14 cent per pound, or about \$26 for each ton of the steamship. The duty on the other materials used in the hull, equipment, and furniture of the steamship would carry up the drawback allowed from the Treasury to about \$34. As the cost of each of the steamships to which we have referred was \$286,317, or \$134 per ton, the net cost to the original owner of a similar steamship under the foregoing plan, after deducting the drawback, would be about \$100 per ton, which, from all the information obtained by your committee, would be substantially the cost of a similar steamship built upon the Clyde. If the steamship were intended only for freighting, with the speed of seven or eight knots, usually found in English freighting steamers, the quantity of iron used, and consequently the drawback and cost, would be considerably reduced. In the case of iron sailing-vessels only about five eighths of the iron used in a first-class steamship for hull, engines, etc., is required for a given tonnage, and the drawback would be about \$15 per ton. The proposed drawback, therefore, will practically effect the increased cost of building an iron steamship in the United States over its cost on the Clyde. This is the unanimous judgment of ship-builders and owners, so far as your committee have heard from them. This is the judgment also of the Board of Trade of San Francisco, which proposed this plan; the Maritime Association of New York, and other commercial boards. So far as the original cost of any kind of a vessel affects the question of the restoration of the American flag to its proper position on the ocean, there is good reason to believe that the policy proposed will solve the problem. It should be borne in mind, however, that the United States Treasury re-

ceives annually about \$1,500,000 from the tax on tonnage engaged in the foreign trade. This tax is not imposed on vessels engaged in the coastwise trade or on any other industry. In 1880 this tonnage tax yielded \$1,490,544, of which \$237,863 was paid by American vessels. During the last fiscal year the amount of the tax was little less, but it is certain to increase as our foreign commerce enlarges. There would be a general concurrence in the justice of abolishing the tax were it not for the fact that England and most foreign nations impose a similar tonnage tax on all vessels entering their ports, and the further fact that five sixths of our tonnage tax is paid by foreign and only one sixth by American vessels, and on account of reciprocal commercial treaties the tax can not be abolished as to our own vessels without also working abolition as to foreign vessels. We can, however, and should use this tax or its equivalent to encourage our own merchant marine employed in the foreign trade. This was precisely what England did when she granted \$10,000,000 out of her tonnage tax to make the Clyde the most favorable location in the world for iron ship-building.

On the reasonable supposition that the tonnage tax will amount to \$10,000,000 during the next five years this alone would meet the drawback demands under the plan proposed for at least 400,000 tons of new steamships and sailing-vessels for the foreign trade during that period. This increase of tonnage would itself go far to revive our foreign carrying-trade, without taking a single dollar from the ordinary revenue. If the addition to our tonnage should be more than this, the additional appropriations required would be wisely expended. From any point of view the experiment is one which affords much promise, and in view of the general indorsement it has received from Boards of Trade and commercial men, and the national importance of the end sought to be reached, ought to be given a thorough trial. If in addition to this direct aid the United States shall imitate Great Britain in giving contracts to private ship-yards to build a portion of any steel war-steamships which it may be deemed wise to construct for our navy, there is reason and hope that favorable results would follow. As it is essential for our iron and steel ship-yards to place themselves in a position to secure contracts for building vessels for South America and perhaps other foreign countries, your committee recommend that a drawback of 90 per cent be allowed on any imported materials of a vessel constructed in the United States for foreign account.

In regard to exemption from taxation the committee said:

There is no one thing that has had more to do in rendering it difficult to sail an American vessel in competition with an English steamship than the different system of taxation of shipping, as well as other invested capital in the two countries. The English system of taxation is on incomes, ours on the value of the property. For example, a steamship valued at \$500,000 and earning 8 per cent net, or \$40,000 annually, would pay in England an income-tax of about 2 per cent, or only \$800. A similar steamship under the laws of every State but Massachusetts and New York (which have recently exempted vessels from local taxation engaged in the foreign trade), and possibly Pennsylvania, would pay a tax of about 2 per cent on the value, or \$10,000. Thus in the single item of taxation, the steamship under the English flag would have every year an advantage of \$9,200, which in so close a business as the foreign carrying-trade would of itself be enough to make it impossible to sail an American steamship in competition with an English rival. Your committee are unanimously of opinion that it is of vital importance to the revival of the American foreign carrying-trade that this difficulty should be removed either by State or Federal legislation. Your committee think that the element of local taxation enters so largely into the solution of the



problem of sailing American vessels that it is incumbent on Congress to exercise the power of regulating commerce, which it possesses under the Constitution, to the extent of prohibiting State and municipal taxation of vessels engaged in the foreign trade.

The following recommendation concerning compensation for mail service has no bearing on the provisions of the bill reported:

The law as it exists (section 3,976, Revised Statutes) compels the master of every American vessel engaged in the foreign trade to carry such United States mails as may be tendered him by the Post-Office Department, and allows him as compensation for such service a sum not exceeding 2 cents per letter carried. In no case is this an adequate compensation, and in some instances it does not pay the cost to the vessel of delivering the mails at the post-office or the port of arrival. The pay to United States vessels in the foreign trade for transporting the mails in 1880 was only 2½ cents per mile, while at the same time the steamers on our coast which contracted to carry the mails received 57½ cents per mile for mail service. The contrast between our inadequate mail pay to American vessels engaged in the foreign trade and the very liberal mail pay given by Great Britain to her steamship lines only serves to show more clearly the injustice and unwisdom of our policy. Since 1840 England has paid more than \$250,000,000 for mail service, with the deliberate purpose of establishing and maintaining steamship lines to connect the United Kingdom with all parts of the world. Even in one year she paid about \$3,000,000 to her steamship lines for mail service, which was \$1,641,300 more than she received from mail matter transported by them. As this subject is before the postal committees of both the Senate and the House, we refrain from reporting any legislation, but unanimously recommend such a modification of our laws as will give fair compensation to American vessels in the foreign trade which may carry our mails, and adequate pay for mail service to American steamship lines that are already or may be hereafter established.

In conclusion, the committee said:

It is unnecessary for your committee to dwell on the great importance of any and all legislative measures that will tend to a revival of the American foreign carrying-trade, and a restoration of the American flag to a position on the ocean commensurate with our population, wealth, and rank in the family of nations. The problem presented to Congress involves interests of exceptional importance. The great agricultural interests of the West and South are especially concerned. To-day at least 85 per cent of their products exported to other countries depend on foreign vessels, mainly English, for transportation, and, unless something is speedily done to relieve American shipping engaged in the foreign trade, our dependence on English ocean-steamers will be complete. This places our commerce at the mercy of England. In case of war between that country and another power able to put cruisers on the ocean, American farmers and the American people as a whole would suffer nearly as much as the belligerents, by having their exports and imports in British bottoms liable to capture and confiscation. . . . While some of the members of your committee do not concur in all the statements and reasoning of the foregoing report, and would recommend additional legislation, yet all concur in recommending the passage of the accompanying bill.

A minority of the committee, composed of its Democratic members, made a separate report, in which a free admission of foreign-built ships and of foreign materials for ship-building was advocated. Its main suggestions were presented in the following form:

1. Let us use, and then we will have cause to repair, and then build. Then the native inventive faculty of America will be aroused, and something will be the result, and that something can not but be better than our present forlorn condition.

2. If we are to build ships in the United States in competition with other nations—and unless we can do so, the ships we may build will never be voluntarily bought or used by our own citizens or any others—our ship-builders must have their materials for construction as cheap as the builders with whom they are to compete. Either allow the importation free of duty of all the material and stores that enter into construction and equipment of ships, or reduce the tariff. So long as the business of constructing iron steamships has to bear the burden of high prices consequent on protective duties, averaging 40 per cent, it can not compete with like industries in free-trade countries. There is no possibility of evading this conclusion. It will be seen by the majority report that our committee, in dealing with the desperate straits of our shipping interests, do recommend a rebate on articles for domestic and foreign account which enter into the making of ships.

3. If foreign competing maritime nations do not subject their ships to local taxation, the United States evidently can not afford to do so. If Congress under the Constitution has the power, it should exempt as instrumentalities to commerce all vessels engaged in foreign or interstate commerce from every form of local, State, or municipal taxation. Concede to the States the right to tax the instrumentalities of interstate or foreign commerce in any degree, and you concede to the States the right to say there shall be no interstate or foreign commerce, for the right to impose 1 per cent of taxation involves the right to impose 100 per cent, or, in other words, the right to destroy.

The report then quotes from opinions rendered by the United States Supreme Court in the case of *Weston* against the State of Missouri and the *Western Union Telegraph Company* against the State of Texas, to show that the court has decided the question unequivocally that foreign and interstate commerce are under the taxing control of the Federal Government. It continues as follows:

Therefore, the full committee, confident of this Federal power over commerce, do not hesitate to present a section of a general nature which overrides all State and Federal taxation. We thus would relieve ships and shipping from these burdens.

4. Reduce all the expenses, taxes, and other burdens on shipping. There can be no objection to the proposed changes of the laws relating to the payment of extra wages to seamen, with some exceptions, or when a vessel is sold, or the voyage improperly continued beyond the port to which the sailors shipped; when the vessel is found to be insufficiently provisioned, and when the master refuses to correct the same. When, by reason of injury to the seamen in the line of duty, or of disease contracted because of want of proper food on shipboard, is it not proper to hold the ship responsible for the expenses incidental to the sickness? The amendments of the Revised Statutes as to transportation of disabled sailors; as to the remission of consul fees; as to the importation in bond, free of duty, of ship supplies for vessels in the foreign trade; as to the reduction of the Marine Hospital tax on seamen from forty to twenty cents; as to the abrogation of the tonnage tax on vessels engaged in trade with Canada; as to the limitation of the part owner of a vessel proportionate to his share, and in case of death and disability by one of the mates of a vessel on a foreign voyage; of the employment of a foreign seaman—these are proper reforms, and in the interest of shipping revival.

5. There is no reason why we should not add to this catalogue the repeal of the United States shipping



act of 1872 (title 53, Revised Statutes). It is a heavy tax on shipping. For its repeal there is a general sentiment in the testimony, with the exception of Captain Duncan, who, with his family and employes in the Shipping Commissioner's office, has used and yet uses the thousands exacted from shipping, and this, too, without any benefit to any one except those who administer the law. The committee, however, have only gone so far on this topic as to allow the ship-master to select his own crew where he elects to do so, and this will relieve the shipping interest, in the opinion of the committee, of a great and crying evil. Under this law our consuls are authorized to act as shipping commissioners in foreign ports, and to exact a fee of two dollars for shipping each seaman. In addition to this, consuls exact their consular fee for certifying each shipment. The expense of procuring each seaman is thus three dollars, and two dollars in addition for the agent who procures the seaman, making in all five dollars. Under the British law the cost is only equivalent to two shillings, or forty-six cents. If, however, the decline of American shipping continues much longer, these reforms will be unnecessary, for there will be no sailors hired or discharged, and no necessity of invoking or discarding the co-operation of consuls, for there will be no ships of ours engaged in foreign trade.

6. Reform and revise the tariff, and the natural resources of our country and the intelligence of our people are such that, with the reduction of the burden of taxes and prices consequent on low rates of duty, we shall regain in the next twenty years more than we have lost in the last twenty, and become the first maritime nation of the world.

7. Without resorting to the artificial expedient of subsidies and bounties, let Congress assimilate in their treatment steamships and railroads on established routes, to the extent of paying steamships for carrying the mails of the United States good compensation—as good as the Government now pays railways for performing similar service.

In conclusion, the minority report says:

Whatever may be the cause of this decay, the main obstacle to its resuscitation, and without the removal of which all other legislation is futile, is the obstruction to commerce by the tariff. This adds its 40 odd per cent, not to speak of prohibition; to the other obstructions which the committee propose to remove by the bills ordered to be reported. When we reform our whole tariff system and extend our markets for our continually increasing surplus, we may revive the means by which we ourselves may exchange the products of this country with those of other countries, and thus not only save the \$140,000,000 paid to foreigners in freightage and fares, but gradually resuscitate that art, the very apprenticeship to which is almost obsolete.

The decadence of our shipping, and its causes, are all too familiar to the public mind. The selfishness which prevents its resuscitation is no less familiar. It is an old, old story. The minority of the committee would repeat it in detail, were it not known to every tyro in commerce and economy. They would rehearse if by studying the causes of the decay we could remove the effects. The simple truth is, the removal of the causes of decay will not revive shipping. Our shipping interests have been choked by other interests—choked to death. Restrictions cumber our statutes. In a country so abundant in production as ours, which seeks every market, and is unlimited in its range of enterprise, the capital policy is *mare liberum*. Give us a free sea and freedom to trade upon its bosom, permit us to buy in the best market the material to fashion vessels of the best quality and to bring the completed ship where our competitors buy their vessels, and even without the opportunity which foreign wars may give to our carrying-trade, and with the aroused inventive faculty of America consequent upon our freedom to use our energy and skill, and with the natural laws

and their conditions to aid intelligence and interchange, and we may once more find the capital, labor, and genius of our countrymen evoke from the sea, as they have from the land, its most valued treasures. Our merchant marine languishes for lack of liberty. Its revival must come from the enlargement of our freedom.

The minority of the joint select committee, while concurring with the report as to the measures reported by the committee, desire also to present two other propositions: First, for the admission free of duty of all the materials finished and perfected and ready to put together a ship; and, second, for the free admission to American registry of ships built abroad.

The amendment to the bill proposed by the minority of the committee was in the following terms:

All or any part of the materials, whether wood, steel, or iron, copper, yellow metal, bolts, spikes, sheathing, treenails, canvas for sails, whether flax or cotton; rigging and cordage, whether hemp, Manila hemp, or iron wire; anchors and cables, iron plates, castings and forgings, angle-irons, beams, masts, yards, rivets, bolts, nuts, screws, engines, boiler-plates and tubes and machinery, and all other materials and appliances which may be necessary for the construction and equipment in whole or in part of vessels, whether steam or sail vessels, to be built and furnished in the United States after the 1st day of January, 1883, may be imported in bond under such regulations as the Secretary of the Treasury may prescribe, and, upon proof that such materials have been used for such purpose, no duties shall be collected or paid thereon. That from and after the 1st day of January, 1883, any citizen or citizens of the United States may purchase the whole of any steam or sail vessel, no matter where said vessel may have been built, whether within the United States or in a foreign country, or whether said vessel shall be registered free of duty as to her hull, spars, appliances, outfit, and equipment (including boilers, engines, and machinery if a steam-vessel) as a vessel of the United States by the collector in any port of entry of the United States, to whom application for such registry may be made by said citizen or citizens, in the same manner as though said vessel had been built in the United States.

The bill came up in the House of Representatives early in January, 1883, and was the subject of an animated discussion. On the 11th of that month the free ships and free materials amendment was in substance adopted by a vote of 125 to 104, the drawback provision of the eighteenth section being also retained, but on the following day the House receded from this action and struck out the whole section as amended, and the others supplementary to its provisions. Section 14 was modified so as to permit the admission of foreign materials, without payment of duty, to be used in the construction and equipment as well as the repair and supply of vessels built for and used in foreign trade, including that between the Atlantic and the Pacific ports of the United States. Section 15 was changed so as to substitute for the existing tonnage tax a duty of six cents per ton on each entry of vessels from the ports of Canada, the West Indies and Mexico, and southward to and including Panama and Aspinwall, and twelve cents a ton on vessels from other foreign ports. The section relating to State and municipal taxation was stricken out. With a few other unimpor-



tant changes the bill was passed by a decisive majority. The vote in favor of striking out the drawback, free ships, and free materials provisions, was 159 to 54.

The bill went to the Senate and was referred to the Committee on Commerce. Strong objection was made by the regular lines of foreign steamers to the fifteenth section, which would increase their tonnage dues materially. Under existing laws these dues were thirty cents a ton per year. This bill would make them twelve cents a ton for each entry, and some of the regular steamers made ten or twelve entries in a year. On the other hand, many foreign sailing-vessels did not enter an American port more than once in a year, and their tonnage dues would be materially reduced. The Senate committee agreed to strike out this whole section, and also the thirteenth, which dispensed with the necessity of employing seamen through the intervention of the shipping commissioner. The committee then added a section repealing the provisions of the existing statutes which obliged all American vessels to carry the mails at a rate of compensation not exceeding the ocean postage, and providing for contracts with vessels of American registry for carrying the mails, under which the Government should pay "not exceeding one dollar per mile on the trip each way," contracts to be entered into, after public advertisement, with the lowest responsible bidder. The aggregate to be expended for this service was limited to \$1,500,000 per year, and the term of the contracts was to be for four years. The bill as amended was reported to the Senate, but not taken up for action until the last day of the session. The amendments striking out the thirteenth and fifteenth sections were then agreed to, and that providing for a mail subsidy was rejected, and the bill was then passed and sent to the House for concurrence in the amendments. That body was engaged in contest over an election case, in which the Democrats were filibustering to prevent action, while the Republicans would permit nothing else to be done. The result was, that no further action could be secured on this important measure, and it failed, leaving American shipping without any relief whatever from the burdens and exactions that have so nearly destroyed it.

**METALLURGY. IRON-SMELTING BY THE DIRECT PROCESS.**—The Siemens direct process for smelting iron has come into general use, with satisfactory results in effecting a saving of time and in the consumption of fuel, the principle of which was stated by Dr. Siemens in a communication to the Iron and Steel Institute in September, 1877, as follows: "In mixing comparatively rich iron-ore in powder with about 25 per cent of its weight in pounded coal, and in exposing the mixture for some hours to the heat of a common stove or of a smith's fire, metallic iron is formed, which, on being heated to the welding-point on the same

smith's hearth, may be forged into a horse-shoe of excellent quality. The admixture with the ore of some fluxing material, such as lime or clay, will, in most cases, be of advantage to rid the iron of adherent slag. The process is conducted in a rotatory furnace, as follows: The ore to be smelted is broken up into fragments not exceeding the size of peas or beans; to it is added lime or other fluxing material, in such a proportion that the gangue contained in the ore and flux combines, with only a little protoxide of iron, into basic and fluid slag. A charge of, say, 20 cwt. of ore is put into the furnace when fully heated, while it is slowly revolving. In about forty minutes this charge of ore and fluxing material will have been heated to bright redness, and at the same time from five to six cwt. of coal of uniform size are added to the charge, while the rotative velocity is increased, in order to accelerate the mixture of coal and ore. A rapid reaction is the result: the peroxide of iron, being reduced to magnetic oxide, begins to fuse, while metallic iron is precipitated by each piece of carbon, and the fluxing materials form a fluid slag with the silicious gangue of the ore. Resorting again to the slow rotative action, the mass is turned over and over, presenting continually new surfaces to the heating lining and to the flame within the rotator. During the time of this reaction, carbonic oxide, besides the hydrocarbon contained in the coal, is evolved from the mixture of ore and carbon, and heated air only is introduced from the regenerator to effect its combination within the rotating chamber. When the reduction of the ore is nearly completed, the rotator is stopped in the proper position for tapping off the fluid cinder, after which the quick speed is imparted to it, by means of which the loose masses of iron contained in it are rapidly collected into two or three metallic balls. These are taken out and shingled in the usual way of consolidating puddled balls, when the furnace is tapped again and is ready for another charge at once." Comparing, on theoretical grounds, this method of producing iron with the operation of the furnace, it appears that while in the blast-furnace the products of combustion consist chiefly of carbonic oxide, and issue at a temperature of more than 350° C., the result of combustion in the rotatory furnace is carbonic acid, the temperature of which rarely exceeds 175° C. Dr. Siemens estimated that his process was competent to produce a ton of iron balls with a consumption of 25 cwt. of coal, and a ton of cast steel with a consumption of 40 cwt. of coal. The first effort to introduce the process into the United States, which was made at Pittsburg, Pa., in 1878, was pronounced a failure. Afterward a rotator was set up at Tyronne, Pa., on a plan a little larger than that used by Dr. Siemens, from which between 80 and 85 per cent of the iron in the ore was produced, with 3,800 pounds of coal per ton of blooms. The results were considered sufficient-



ly satisfactory to warrant the construction of a larger concern at Pittsburg by the Siemens-Anderson Steel Company. The rotator plant of this establishment consists of four vessels measuring 11 feet 4 inches in diameter and 12 feet in length inside the shell, lined with Woodland fire-brick four and a half inches thick. The entire charge of ore, limestone, and reducing coal, is introduced at once. The vessel is slowly rotated at the rate of one revolution in every fifteen or eighteen minutes. In about four hours the slag begins to form; and, when it becomes perfectly liquid, it is tapped off. The flow of slag continues until the completion of the heat and the drawing of the balls. The yield of iron with fair grades of hematite ores, in December, 1881, ranged from 34.3 to 47 per cent. Several charges with Lake Superior and Tyrone ore have yielded more than 50 per cent; and Mr. George W. Maynard, of New York, who has given an account of the enterprise before the American Institute of Mining Engineers, expresses no doubt that an average yield of 50 per cent can be kept up with this mixture. The average time for forty-eight heats, "through good and bad," from the charging of the ore to the drawing and shingling of the balls, was a little more than nine hours, and it was anticipated that with more experience the time would be reduced to eight hours, or three charges in twenty-four hours, with a product of 15 tons of blooms. The cost of 38 tons of hammered steel blooms produced during the week ending December, 1881, was \$30.15 a ton; with regular working, however, 90 tons might have been produced at an estimated cost of \$25.24 a ton. The blooms have proved to be of excellent quality, and the steel made with them upon the open hearth is superior to that made with scrap-iron or scrap-steel. The cost of making open-hearth spring steel from the blooms is estimated by Mr. Maynard to be \$37.18 a ton. The results so far obtained at Tyrone and Pittsburg, though very encouraging, are far short of what Dr. Siemens has set out to accomplish. That mark has, however, been reached at the works in Landore and Worcester, England, where from one ton of small Somorrostro ore and twelve hundred-weight of hammer or roll scale, with one ton of producer coal and six hundred-weight reducer coal, has been produced one ton of iron, at a cost of £1 12s. 9d.

In the Bromfield direct process of Mr. J. Coley-Bromfield, Hone, near Brighton, England, the iron-ore and coal, or coal-dust, are reduced to a powder by means of a Marsden or a Western pulverizer. The pulverization of the ore may be facilitated by previously calcining it. For this purpose it is roasted in grated ovens above a tank filled with water. The roasted ore can pass directly from the ovens into the water in the tank, when it becomes so disintegrated and friable that the reduction can afterward be accomplished at an expense almost nominal. The crushed iron-ore

and coal-dust are then mixed, and to them is added carbonate of lime, also powdered, ready for mixing, alumina and sand, after which the materials are passed through a mixing-machine. The compound produced by the mixer is then made plastic by adding a mucilage extracted from steamed sea-weed, which cements it together, and it is then molded and compressed in a kind of brick-making machine. The compressed materials, in the form of bricks or cylinders, are then removed to a retort, when they are consolidated into coke by a process similar to that for gas-making, but with a specially constructed furnace. Carbonate of lime or calcium oxide is added to the fire-clay in the upper part of the retort, to absorb the sulphur given off from the ore during the process of distillation. As the materials have been powdered and intimately mixed so as to be brought within the close grasp of their several chemical affinities, a great saving of fuel is effected and the output of the furnace is largely increased. Mr. Bromfield expresses confidence that the adoption of his process in the old blast-furnaces will be attended by several salutary results, among which are an increase of 30 per cent in the weekly produce of iron; the invariable production of a pig wholly free from injurious impurity and yielding malleable metal of the largest fiber, no matter how much sulphur may originally have existed in both the fuel and the ore; a very large saving in the average quantity of fuel now required for the smelting of each ton of pig; and the realization of all these advantages at a cost so small as to be hardly worthy of consideration when viewed in connection with the additional net profit. Another advantage is claimed in the high commercial value of the results to be obtained by economizing and utilizing the products contained in the materials placed in the retorts, but which under the present usage are allowed to escape into waste. It is believed that these products will alone repay the cost of preparing the iron-ore for the smelting-furnaces.

APPLICATIONS OF MANGANESE BRONZE.—Great improvements are promised in the construction of steamship-propellers from the adoption of manganese bronze. A theoretically perfect propeller should have blades presenting the requisite surface of the right form to act against the water so as to utilize the whole power of the engines in the line of the vessel's keel, while no resistance should be excited from cleaving the water. These conditions can not be realized, because there is a limit to the extent to which the thickness of the blade can be reduced, and it is impossible to do away with surface-friction; but a nearer approach can be made to them with the use of the substance just named than with any other material that has been suggested for the purpose. Manganese bronze has great strength and toughness, its transverse strength being double that of the best gun-metal, and up to

the elastic limit nearly double that of cast-steel. The blades, therefore, can be made of it much thinner and lighter than of steel and gun-metal. The blades, when cast, come out of the sand true and smooth, and, as they do not have to be annealed, are wholly free from the distortion to which steel blades are liable in passing through that process, and which, inducing a variation from the theoretical form, causes in them a serious waste of power. This metal is also free from the liability to pitting and corrosion, for which allowance has to be made in all steel propellers by giving them greater thickness than is necessary for strength, and thereby increasing the resistance; and it is practically incorrodible. Other practical advantages which may arise from the use of this substance are the reduction in weight effected by its use, with a corresponding reduction in the stem-frame of the vessel in a heavy sea; and facility of restoring the shape of the blades if they are bent, and of replacing them if they are broken. The drawback lies in the cost of manganese bronze, which is about twice, for the same weights, that of steel; but the friends of the use of this metal assume that this will be more than offset by the reduced quantity of the metal that will have to be employed, and in the practical indestructibility of the manganese bronze. Steel propellers require to be renewed every few years; those of manganese bronze, it is claimed, will last the lifetime of the vessel.

Dr. G. Dudgee, of New York, has invented a process for manufacturing iron direct from the ore by the aid of crude petroleum as fuel, in a special revolving furnace. It employs two furnaces, which are placed at slightly different levels, with a total length of 120 feet, the working capacity of which is a hundred tons of ore in twenty-four hours. The ores are pulverized and then submitted to the action of an oxyhydrogen-flame produced by a blast of air with petroleum and coal-dust. The first experiments with this process were reported to be successful and encouraging; but late statements of its working have not been published.

**DEPHOSPHORIZATION IN IRON-SMELTING.**—The Gilchrist-Thomas, or basic, process for the dephosphorization of iron in working the ore depends for its efficacy upon the power of lime to absorb phosphoric acid. When it is used in connection with the Bessemer process, the Bessemer vessel is lined with magnesium lime, which has been previously subjected to an intense white heat, and so brought to a condition of density, tenacity, and hardness in which it resembles granite or flint more closely than ordinary well-burned lime, in which condition it is known as "shrunk lime." Before the metal is run into the converter, from 15 to 18 per cent of its weight of common well-burned lime is thrown into the vessel. The metal is then introduced and the charge is blown in the ordinary way to the

point at which the ordinary Bessemer operation is stopped—that is, till the disappearance of the carbon, as indicated by the drop of the flame. The dephosphorizing process requires, however, to be continued for from one hundred to three hundred seconds longer, during which the great bulk of the phosphorus is removed. Not only is the phosphorus removed by this operation, but the silicon also, of which inconvenient and even dangerous quantities are occasionally left in the Bessemer process, is entirely eliminated, while at least 60 per cent of any sulphur, also untouched in the ordinary process, which may have been present in the pig, is also expelled. The phosphorus is, in fact, made a real assistance in the perfection of the process, through the intense heat it affords by its combustion. The substantial position occupied by the basic process is well shown by the large amount of basic steel which was turned out in October, 1882. Germany held the first position, with an output of 25,170 tons by eight firms; England stood next, with an output of 7,700 tons by one firm; then followed Austria, with 7,700 tons by three firms; Belgium, with 1,687 tons by one firm; Russia, with 1,270 tons by one firm; and France, with 1,240 tons by one firm—giving a total output for the month of 46,537 tons, by fifteen firms. The process had been adopted at the end of 1882 by thirty-two European firms, which had working furnaces, or were constructing them, and thirteen other firms had taken out licenses for its use.

**IMPROVEMENTS IN STEEL-MAKING.**—A new process in rolling steel, called the "Soaking Pit Process," has been introduced by Mr. John Gjess, of Middlesbrough, by means of which the bloom may be rolled into a rail or other finished article with its own initial heat, and the necessity of submitting the ingot again to the heating-furnace is avoided. The chief difficulty heretofore met in utilizing the heat of the ingot, to work it up into the finished product, has been that the bar when newly stripped was too hot in the interior to be rolled, and when the interior was in a fit condition, the exterior was far too cold. In the new process, the ingots are placed in pits, where little or no heat being able to escape to the surface, and the ingots being surrounded by walls as hot as themselves, the surface heat of each one of them is greatly increased, and it becomes fit for the rolling-mill in about half an hour. The process was introduced in June, 1883, at the Darlington Steel and Iron Company's works, where three hundred ingots were treated in the pits every twenty-four hours, and at the West Cumberland Steel Works; and more than 30,000 tons of ingots had been successfully treated by the close of the year at each place. The economical advantages of the process are obvious. The steel manufactured by it, whether for rails or wire billets, is thought to be improved by it, for the danger of burning, to which all reheated steel is liable, and which



is detrimental to the soundness of the fabric, is wholly obviated in it.

**BESSEMER STEEL IN THE UNITED STATES.**—From the reports of the companies owning the fourteen completed Bessemer-steel works which were in operation in the United States in 1882, it appears that 1,696,450 net tons of steel ingots and 1,253,129 net tons of steel rails were produced during the year. These figures represent an increase in production of 10 per cent in ingots and of 6 per cent in rails over the production of the same mills in 1881. The rate of increase is much smaller than had been made before for several years. Thus, the increase in the production of ingots in 1881 was 28 per cent over that of 1880, while that of the latter year was 30 per cent over that of 1879. The figures representing the production of rails do not cover the total production of steel rails in the United States, as some rails were rolled in 1882 from imported steel blooms, and some open-hearth steel rails were rolled. Estimating the amount of such rails to be near 100,000 gross tons, the total American steel-rail production in 1882 would be 1,300,000 gross tons, against a total in 1881 of 1,210,285 gross tons. The fourteen steel-works whose reports are thus compiled contain 35 converters. Relative to the production of steel throughout the world, it appears from the latest published statistics that there are now in England 23 steel-works, with about 115 converters, of a productive capacity of 1,461,000 tons per annum; in Austria, 14 steel-works, with 36 converters, and a capacity of 350,000 tons; in Belgium, 4 steel-works, with 18 converters, and a capacity of 380,000 tons; in France, 7 works, with 34 converters, and a capacity of 632,000 tons; in Germany, 23 Bessemer and Thomas steel-works, with 80 converters, and a capacity of about 1,300,000 tons; in Russia, 5 steel-works, with 10 converters, and a capacity of 100,000 tons; and in Sweden, 35 converters, with a capacity of 80,000 tons. The total number of converters in the world is, therefore, about 360, with an aggregate annual productive capacity, in round numbers, of 5,800,000 tons of steel.

**PRODUCTION OF ALUMINUM.**—An improved process for producing aluminum, whereby the cost of the metal is reduced by about 80 per cent, and the time required to prepare it from nine months to a few days, has been invented by Mr. James Webster, of Hollywood, near Birmingham, England. Alumina, from which the metal is obtained by precipitation, is prepared by burning alum and pitch, as follows: A given quantity of alum and pitch, which are first finely ground, is mixed together and placed in a calcining furnace, when 38 per cent of water is driven out, and the sulphur, potash, and alumina are left, with oxide of iron. The calcined mixture is then put into vertical retorts, and steam and air are forced through, after which a residue of potash and alumina

only is left. This residue is afterward placed in a vat filled with warm water, which is heated with steam. The potash is thus leached out and the alumina left as a deposit. The potash-liquor is then run off and boiled down, while the alumina precipitate is collected in sacks and dried. It is then ready for making chloride of aluminum. The alumina deposit thus obtained contains about 84 per cent of pure alumina, while that which is obtained by the old process of precipitation has only 65 per cent. For conversion to aluminum, the chloride is treated with sodium. This process, if its success is verified, is probably destined to make it possible to employ aluminum, as an alloy, economically in many manufactures for which it is preferable to any metal now known. It is eight times more conductive to the galvanic current than iron, and by this, and the fact that it does not rust, it is valuable for telegraphic purposes. Its tensility, and lightness, and unsusceptibility to corrosion indicate a great adaptation to the purposes of ship-fittings, particularly for steamship propellers. The alloy, it is said, will bear a strain of forty-two tons to the square inch, or twelve tons more than Bessemer steel. A more particular statement of its mechanical powers was given by Mr. W. H. Barlow, F. R. S., at the last meeting of the British Association, in the relation of some experiments he had made on the subject. He found the ultimate tensile strength of the metal to be about twelve tons to the square inch. The range of its elasticity was indicated by an extension at the yielding-point of one two-hundredth the length of the piece, or about three times that of steel, and five times that of wrought-iron. The mechanical value of the substance, as indicated by its strength in relation to its weight, is about equal to that of steel of thirty-five tons per inch. These properties point to a great suitability of aluminum for cases where strength combined with lightness and a great range of elasticity are required. Mr. Webster has also discovered that aluminum may be deposited on several other metals, and may be soldered and welded.

**ZINC.**—The present methods for the reduction of zinc ores by distillation are expensive and cumbrous. In the search for more economical ways of preparing metallic zinc, attention has been directed to the feasibility of producing it by a wet process and electricity. Three methods have been proposed which depend upon the employment, severally, of hydrochloric, nitric, and sulphuric acids. In the hydrochloric-acid process the acid is placed in contact with the ore in order to produce a hydric chloride, neutral and concentrated; after which the liquid is treated with an electric current, by which the zinc is precipitated in a pure metallic state. The iron, which would otherwise be precipitated with the zinc, is previously eliminated by means of some oxidizing body. The chlorine, which is liberated when

the zinc is separated from its salt, is drawn off into a chamber where it is absorbed by chalk. This process is defective on account of the loss of metal in smelting, and the presence of chlorides of zinc as an impurity. In the nitric acid method, an oxide is produced by the electrical decomposition of the salt, and it is necessary to add some organic matter, such as glycerine, a gum, etc., for the removal of the oxygen. To obtain enough nitric acid and organic matter the process has to be conducted near where some chemical industries are carried on. In the sulphuric-acid process, also called the Le-trange process, the solution is effected by means of the sulphuric acid obtained from the ore itself in the process of roasting. No reagent being required, the method is independent of other industries, and is free from all expense of transportation. Though principally intended for blende, it is available for all the ores. It is very simple, and does not require the separation of substances containing lead, nor, if sulphuric acid is evolved in excessive quantities, the removal of the calcareous gangues. Only a moderate roasting is required when only blende is treated; but if the ore be only calamine or the oxides of zinc, it is necessary to feed the bath with a certain quantity of acid or sulphates. The sulphurous vapors produced by roasting the blende may often be used for this purpose. As acid is continuously reproduced during the process of precipitation, it will only be necessary after that is started to provide as much sulphate as will furnish the necessary acid to be absorbed by the foreign matters, the chalk, iron, etc., contained in the ore. The electrical current necessary to effect the precipitation is furnished by machines driven by steam or water power. By this process the zinc contained in the ore is extracted in its entirety, and pure. The cost of treatment is limited to the working of the electrical apparatus, and to manual labor of the most simple character.

**COPPER.**—Copper is prepared at Spenceville, Cal., from a fine-grained pyrites in a kind of chlorite slate. The ore, which has been previously broken into small lumps, is put upon a base of fire-wood around a loose brick flue, and piled up with layers of brush at intervals; salt is distributed through the pile, tank residue is placed on top to exclude the air, and the heap is then fired. The process of roasting requires six months. In the leach-vats, of which there are fifty, with a capacity for 120 tons of roasted ore, the leaching is hastened by boiling with steam. The copper is precipitated with scrap-iron.

**NICKEL.**—Nickel-ores are quite extensively distributed through the United States—more generally than is usually supposed. The chief source of supply is at Lancaster Gap, Pa., but the ores are also found in Connecticut, by the Hudson River, and in New Jersey, associated with chrome-ores, where they appear in the shape of a coating of nickel oxide or emerald

nickel; also associated with magnetic pyrites. Deposits have also been found in the mag-nesian rock at Quebec; at Silver Harbor, on Lake Superior; in Nevada; and in Douglas County, Southern Oregon. The hydrated silicate of New Caledonia, a very pure ore, has been found to be in sufficient abundance to supply nearly all the works of Europe. Professor Wharton exhibited at Philadelphia, in 1876, a number of articles that had been made by him of wrought nickel. He showed them again in 1878, in Paris, where they attracted but little notice at first, but excited great admiration when the attention of the judges was called to the quality of the metal. Experiments, prompted by this demonstration, were immediately tried on a more extensive scale, which resulted in raising the manufacture of nickel to a considerable importance. Sheets of iron and steel have been coated by welding with nickel on both sides, so as to furnish a combination adapted to the manufacture of many articles of hollow ware. Professor Wharton has succeeded in making several articles of cast-nickel, among which are the door-knobs of his house in Camden, N. J. He has proved that the metal will not tarnish, by exhibiting objects which were shown at the Paris Exhibition in 1878, and are as bright as ever, although they have not been rubbed or polished since. A French company is making a considerable variety of useful articles from the nickel of New Caledonia. Mixed with zinc, copper, or tin, in such a proportion that it shall constitute 20 per cent of the combination, this metal forms an inoxidable nickel bronze; a material of which all articles that are now made of brass or copper, and nickel-plated, may be made at practically the same cost, while they will be one fifth stronger and may be as much lighter. Added to steel, nickel increases its hardness, renders it inoxidable, and makes it more suitable for edge-tools.

**MICROSCOPICAL ANALYSIS OF IRON AND STEEL.**—Dr. H. C. Sorby, F. R. S., has recently made known the results of some interesting investigations he has been making in the microscopical structure of iron and steel. His specimens were prepared for examination by polishing very thin plates of the metal and subjecting their surfaces to the action of nitric acid till they were sufficiently etched to bring out the details of the arrangement of the particles, the development of which was due to the fact that some of the constituents were not acted upon at all, and others in varying degrees. As far as could be learned from the careful use of the microscope, various kinds of iron and steel contain at least seven well-marked constituents. They are pure iron; what are probably three well-marked compounds of iron with varying amounts of carbon or other substances which are met with in small quantities in different sorts of iron and steel; portions of included slag; well-marked crystals of graphite; and a small crystal, which may be silicon. The



structure of various kinds of cast-iron appears to be chiefly modified by the presence of crystalline plates of graphite, over which is deposited what is probably free iron, while the interspaces are filled with what are probably two distinct compounds of iron and carbon. In other cases, the structure is mainly dependent on the crystallization of the iron itself, the graphite being thrown off toward the close of the process. In white refined iron the principal constituent is probably an intensely hard refined white iron with much carbon, and one or more of the other compounds of iron and carbon. Hammered bloom consists of an irregular mixture of crystals of iron and portions of slag. When rolled into a bar those portions of slag not squeezed out are thrown out into long threads. The crystals seen in the bar are not the original crystals of the bloom, but fresh crystals formed on the cooling of the bar. The fiber seen on fracturing specimens of wrought-iron is mainly due to the elongation that occurs during the fracture, and is not a characteristic of the unaltered iron. The most characteristic feature of the change of structure produced by the cementing process is the development of a network of flat crystals of an intensely hard compound of iron and carbon, which is scarcely acted upon by dilute acid. The structure of Bessemer steel ingots is materially different from that of the varieties of steel containing more carbon, and, though of coarser grain, closely approaches the structure of some varieties of Swedish iron. This structure, upon hammering, is greatly altered, and becomes of finer grain and more uniform.

Mr. J. C. Bayles, of New York, after reviewing before the American Institute of Mining Engineers the researches of Mr. A. Martens, of Berlin, and Mr. Sorby, on this subject, and giving an account of his own method of preparing the objects for examination, expressed the belief that the method opens a vast field of knowledge not yet reached by either chemical analysis or physical test. There are many conditions the result of changes produced by mechanical treatment to which chemical analysis gives no clew, and which are detected but not explained by the tests of the physical laboratory.

**DETERIORATION OF TIN.**—At a late meeting of the American Institute of Mining Engineers Professor R. H. Richards, of Boston, exhibited a pig of block-tin which had appeared to be of a perfectly good quality, but was found after the lapse of a few months to have become brittle, and to have undergone a change in its molecular condition that involved about half of the mass. The change made itself apparent by enlargement in spots which took on a darker color and revealed a crystalline structure like that of stibite. It was believed to be due to the presence in the tin of a small percentage of mercury with which the metal was originally treated, left after an imperfect heating; and the analysis of a part of the pig showed that

about 2.62 per cent of mercury was actually present. The fact of this deterioration taking place is not new. Dr. T. Sterry Hunt called attention to the fact that it had previously been ascertained that block-tin, under certain conditions, would undergo the changes described; and he cited an instance of a piece of the metal which, supposed to be in a state of purity, afterward became so crystalline that it was almost ready to fall to pieces.

**IMPROVEMENTS IN ELECTRO-PLATING.**—Some further improvements in the electro-deposition of brass, bronze, and other metals have been patented by Mr. W. H. Walenn, of London. The first object of the inventor was to produce a coating that should be adherent and in a soft condition. For this a solution is used which is composed of thirty-two ounces avoirdupois of cyanide of potassium (70 per cent real cyanide) and one ounce of neutral tartrate of ammonium per gallon of liquid, which is charged with copper by an electrolytic process, and is made complete by the addition of cupric ammonide. The solution is used at a boiling-point, or near to it, when the coating of copper is softened, and the rate of deposition is very materially increased by the heat. The quality of the work done by this process is illustrated by the fact that thin sheet-iron plates treated by it have been given a coating so adherent that *repoussé* work could be executed upon them without interfering with the continuity of metal and without exposing the coated metal underneath. If a plate were hammered to destruction, the copper coating would be simply extended over the iron where it was cracked or broken. Mr. Walenn's invention also includes methods of preventing the too great evaporation of the solution while it is heated during deposition, for working the electro-depositing solutions in a closed vessel under a known pressure.

**PROTECTION OF IRON AND STEEL SURFACES FROM RUST.**—The Bower-Barff process for preserving iron and steel from rust is based on the fact that a film of magnetic oxide on the surface of a mass of either metal will protect the whole from further oxidation or corrosion. The resisting power of Russia sheet-iron has been found to be due to this cause. To Professor Barff is due the credit of being the first deliberately to undertake to coat iron and steel with magnetic oxide produced designedly for the purpose of protecting their surfaces from rust. To effect this, he subjected the metal to the action of superheated steam. The Bower process is based upon the use of combustible gases and air, or free oxygen. The gases are burned in a fuel gas-producer, which is similar in principle to the Siemens regenerator, with a slight excess of air over that required for perfect combustion, while the iron articles to be heated and oxidized by the products of the combustion are exposed to them in a suitable brick chamber. When the quantity of free oxygen mixed with the products of combustion is rightly adjusted, the iron articles

are oxidized to excess in about forty minutes. Magnetic oxide will then be found nearest to the iron, and sesquioxide over all. The air-inlet is next closed entirely, while the gas-valve is left open for twenty minutes, at the end of which time the outside coating of sesquioxide will be reduced, by the action of the combustible gases alone, to magnetic oxide. The Bower process is the more energetic of the two. The Barff process is the better one for wrought-iron, and perhaps for polished work of all kinds, while the Bower process is better for cast-iron, especially for that quality of it which contains much carbon. Steel—except polished steel, which is better treated in a low-temperature Barff furnace—can be equally well treated by both processes. These processes not only protect the metal from rust, but they give it a finely colored coating, which makes articles made of it ready for the market as soon as they are out of the furnace and cool. A ton of small articles can be as cheaply treated by them, save the difference in expense of handling, as a single article of a ton weight. So penetrating are they, that every crevice, even in the most intricate pattern, may be as effectively coated by them as the plainest surface. Paint will adhere to the coating as to wood or stone. As a whole, the processes are suitable to make iron available for a thousand purposes for which it is now not adapted, because of its liability to rust.

**METHODISTS. I. METHODIST EPISCOPAL CHURCH.**—The following is a general summary of the statistics of this Church as they were reported in the "Minutes" of the Annual Conferences for 1882: Number of annual conferences, 99; number of missions not included in annual conferences, 13; number of bishops, 11; number of itinerant preachers, 11,028; number of preachers on trial, 1,337; number of local preachers, 11,967; number of members in full connection, 1,572,177; number of probationers, 175,841; whole number of lay members, 1,748,021; number of churches, 18,152; probable value of the same, \$65,467,082; number of parsonages, 6,224; probable value of the same, \$9,250,288; number of Sunday-schools, 20,901, with 224,667 officers and teachers, and 1,629,358 scholars; number of baptisms during the year (57,241 of adults and 56,805 of infants), 114,046. Amount of benevolent contributions: For conference claimants, \$167,693; for the Missionary Society, \$624,186; for the Woman's Foreign Missionary Society, \$107,673; for church extension, \$110,900; for the Tract Society, \$15,320; for the Sunday-School Union, \$16,991; for the Freedmen's Aid Society, \$56,808; for the Educational Fund, \$49,039; for the American Bible Society, \$29,209.

The *General Committee of Church Extension* met in Philadelphia, Pa., November 2d. The financial report showed that the committee had received during the ten months already past of the current year, \$109,895 on general account,

and \$82,881 on loan fund account; in all, \$192,277. It had spent within the same period, \$106,085 on general account, and \$68,809 on loan fund account; in all, \$174,394. With these expenditures, it had aided with gifts or loans, or both, 388 churches. A cash balance of \$57,210 was left with the board at the time of making the report, but against this it had made grants, on conditions, of \$72,070 to 197 churches. Applications were on hand from 43 churches, asking for \$18,805. Progress was reported on a plan which had been set in operation to raise enough by subscriptions of \$250 each to build four hundred churches on the frontiers, each of which should receive aid to the amount of \$250, as follows: Amount of donations, \$32,750; of loans, \$19,100; number of churches built, 131, at a cost of \$286,955, having 34,000 sittings, 4,904 members, and 7,884 Sunday-school scholars, and giving church facilities to a population of 144,130. The subject of inviting contributions to the general funds, subject to life annuity, was considered.

The paid-up capital of the loan fund at the end of 1882 amounted to \$500,000.

The annual meeting of the *Board of Education* was held in New York city, November 14th. The receipts from collections, legacies, and other sources had been \$18,026, against \$9,256 in 1881, and \$2,079 in 1880. More than \$11,000 were to be disbursed during the year in aid of 250 students attending the institutions of the Church in the United States and foreign lands. Ten thousand dollars were appropriated for the same purpose in 1883.

The total receipts of the *Freedmen's Aid Society* for the year ending July 1, 1882, were \$118,070.60. To the 1st day of November of the same year the society had aided in the maintenance among the freedmen of 6 chartered colleges, 4 theological schools, 1 medical college, and 14 institutions not chartered, in which 95 teachers were employed, and 3,506 students were taught. Of these students, 440 were in the biblical, 15 in the law, 75 in the medical, 225 in the collegiate, and 1,470 in the normal departments. In accordance with the action of the General Conference of 1880, 14 institutions for the whites of the South have been organized, at which 1,827 pupils were taught during the year.

The *General Missionary Committee* met in the city of New York in November. The treasurer reported that the total receipts of the society for the year had been \$691,666, or \$66,002 more than the receipts for the previous year. A decrease of \$28,348 in liabilities was reported.

Appropriations were made in support of missions during the ensuing year, as follow:

For the foreign missions (in Liberia, South America, China, Germany, and Switzerland, the Scandinavian states, India, Bulgaria, and Turkey, Italy, Mexico, and Japan), \$362,379. For missions in the Territories of Arizona, Dakota, the Indian Territory, Montana, New Mexico,



Utah, etc., \$57,100; for domestic missions among the foreign, Indian, and English-speaking populations of the United States, \$248,300; total, including miscellaneous appropriations and \$32,000 for the liquidation of the debt of the society, \$777,849. The foreign missions returned in their annual reports, 269 foreign missionaries and assistants, 246 native ordained preachers, 1,025 native assistants, 1,498 other helpers, 29,095 members, 9,984 probationers, 80 day-schools with 12,913 scholars, and 303 churches.

The domestic missions employed 2,381 missionaries, with local preachers and teachers.

The *Woman's Foreign Missionary Society* received for the eighteen months ending November 1, 1882, \$195,678. It returns 42 missionaries, 350 Bible women and teachers, 6 hospitals and dispensaries, 16 boarding-schools, 140 day-schools, 3 orphanages (400 orphans), and 1 home for friendless women, in eight several mission-fields.

The committee appointed by the bishops of the Church met in November and took the preliminary steps for holding in 1884 a centennial celebration of the organization in 1784 of the Methodist Episcopal Church, in which all organizations of American Methodism should be invited to unite. A committee was appointed to correspond with other American Methodist Churches on the subject.

II. METHODIST EPISCOPAL CHURCH, SOUTH.—The "General Minutes" of the conferences of this Church for 1881 give the following statistics of the Church for the year: Number of traveling preachers, 3,704; of superannuated preachers, 307; of local preachers, 5,865; of white members, 844,367; of colored members, 993; of Indian members, 5,451; total of ministers and members, 860,687, showing an increase during the year of 12,894; number of Sunday-schools, 9,310, with 62,442 teachers and 462,321 scholars, showing an increase during the year of 21,707 scholars.

The *General Conference* of the Methodist Episcopal Church, South, met at Nashville, Tenn., May 3d. The bishops of the Church presided over the sessions of the body in alternation. The address of the bishops presented a view of the present condition of the Church during the past four years. The number of ministers active in the thirty-nine annual conferences and the mission-fields had increased by 247, and was now 3,704; the number of members had increased from 798,862 to 860,687. Thirteen thousand members had been added during the past year. The amount of church property and the accommodations for congregations had increased in proportion with the other items, and much progress had been made in the payment of debts. The sum of \$354,372 had been contributed for foreign missions against \$242,934 in the preceding four years, and \$226,850 against \$216,916 for home missions. Home-mission work had been extended through Colorado and New Mexico

toward Arizona, in Northwestern Texas, among the German settlers in Louisiana and Texas, and in the Indian Territory. The Indian mission had steadily grown, and there were now in the conference that represented it more than 5,000 members—Cherokees, Choctaws, Chickasaws, Creeks, and Seminoles, besides several hundred white people and negroes who had obtained citizenship or the right of residence among the natives; who were served by more than thirty traveling preachers—most of them Indians—and one hundred and twenty local preachers. The Mexican Border Mission included nearly a thousand ministers and seventeen native preachers. The foreign missions, in Central Mexico, China, and Brazil, had been strengthened by the addition of new missionaries. The *Woman's Missionary Society*, four years old, had sent out five missionaries to China, Brazil, and Mexico, and was building a boarding-school at Laredo, on the Rio Grande. The number of Sunday-schools had increased during the four years by more than 2,000, and the number of pupils by 71,000. The Sunday-school literature had been improved in quality, reduced in price, and increased in circulation. The condition of the Publishing House had been materially changed for the better. While, four years before, the claims against the establishment amounted to more than \$300,000, and were drawing interest at the rate of \$60 a day, and the liabilities exceeded the assets by more than \$100,000, it now reported an excess of \$50,000 of assets over liabilities, with the whole of its remaining indebtedness in manageable shape. The negro population of the South and Southwest, which had for several years been turned away from this Church, was again becoming accessible to its influence. The Colored Methodist Episcopal Church, which had been organized ten years before, at the request of colored members, had maintained its integrity and made some progress. It needed better facilities for the education of pastors and teachers of the colored race, and the favorable consideration of the General Conference was invoked for measures to help it in this work.

The agent of the Publishing House reported that he had received a bequest from a lady in Virginia of \$2,500 to the establishment "for the use of the Church in spreading and disseminating the gospel among mankind"; and that the sum of \$266.17 had been paid him by John Whitman, of Philadelphia, as a balance due the Methodist Episcopal Church, South, in the division of the property of the Methodist Episcopal Church under the action of the General Conference of 1844, which sum he had entered under the title of "suspended assets." The Conference ordered the latter sum to be turned over to the Publishing House as a part of its capital. Fraternal communications were received from the African Methodist Episcopal Zion Church and the Colored Methodist Episcopal Church in America. Bishop Wood, of the African Methodist Episcopal Zion Church,

spoke of that body as one which held a relation to the Church, South, that it held to no other body; it occupied the same field of territory with it without rivalry. The communication from the Colored Methodist Episcopal Church contained a request for aid in the erection of school-buildings. The church had purchased sites for schools during the past year at Jackson and Byhalia, Miss. The people were willing and ready to contribute, but their financial circumstances did not permit them to give much. They also needed mission-money, particularly for the building up of missions at such places as New Orleans, La., Atlanta, Ga., and Corinth, Miss. Fraternal answers were returned to the letters of both churches. The Conference approved a recommendation for the organization of annual conferences in China and Central Mexico during the ensuing four years. A plan for church extension was adopted, and a Board of Church Extension organized, which is to have its seat at Louisville, Ky., and to obtain a charter from the State of Kentucky. A new chapter on temperance was adopted, to be inserted in the Discipline, the provisions of which are as follow:

Let all our preachers and members faithfully observe our General Rule, which forbids "drunkenness or drinking spirituous liquors, unless in cases of necessity"; in cases of drunkenness let the discipline be administered as in case of immorality; drunkenness being a crime expressly forbidden in the word of God. In cases of drinking, except in cases of necessity, let the discipline be administered as in case of imprudent or improper conduct; let all our preachers and members abstain from the manufacture or sale of intoxicating liquors to be used as a beverage, and if any shall engage in such manufacture or sale, in such case proceed as in cases of imprudent and improper conduct.

The Conference decided to elect five new bishops, and Alpheus W. Wilson, Linus Parker, Atticus G. Haygood, J. C. Granberry, and B. K. Hargrove were chosen to that office. Bishop Wilson was, at the time of his election, Missionary Secretary to the Church; Bishop Parker, editor of the "New Orleans Christian Advocate"; Dr. Haygood, President of Emory College; Bishop Granberry, a Professor in Vanderbilt University; and Bishop Hargrove had filled several responsible positions in the church. Dr. Haygood, believing that the circumstances of Emory College demanded his continued presence there, declined to be ordained bishop, and the Conference determined to elect no other person in his place. A resolution was adopted—

That the matter of changing the name of the Methodist Episcopal Church, South, to the Methodist Episcopal Church in America, be referred to the several Annual Conferences by the bishops during the ensuing four years, and that they report the result of the vote to the General Conference of 1886 for ratification.

Action was taken in favor of the celebration, in 1884, of the centenary of the formal organization of Methodism in America, which took place in 1784, by participating in a conference of Methodist bodies to be held in Baltimore, Md., during that year, and by endeavoring to

raise the sum of two million dollars, to be applied equally, save where donors shall give special direction to their gifts, to the causes of education, church extension, and foreign missions; and a committee, consisting of twelve ministers, twelve laymen, and the bishops, was appointed to take charge of the whole matter, and report to the next General Conference.

III. COLORED METHODIST EPISCOPAL CHURCH.—The statistical reports of this Church, made to the General Conference in May, gave the number of ministers as 1,749, and of members as about 125,000. The increase in the number of members during four years had been 18,917. Report was also made of 1,450 Sunday-schools, with 3,973 teachers and 42,254 scholars.

The *General Conference* of the Colored Methodist Episcopal Church in America met in Washington, D. C., in May. Attention was given to the enterprises for the benefit of the members of the Church in the Southern States; to missions, from which favorable reports were received; to the interests of the Metropolitan Church of the denomination in Washington, and the payment of the debt upon it; and to the affairs of the denominational organ, the "Christian Index," the entire control of which was assumed, and its office of publication fixed at Jackson, Tenn.

A *Convention of the Bishops* of the Colored and African Methodist Episcopal Churches was called to meet in Baltimore, Md., April 26th, to consider the subject of a union of the two bodies. All of the bishops of the African Methodist Episcopal Church were present, but only one of the four bishops of the Colored Methodist Episcopal Church. As a majority of the bishops of the latter body could not attend the Conference, the consideration of the question of union was deferred. The bishops of the African Methodist Episcopal Church, however, expressed themselves ready to meet the bishops of the other body in council at any time or place they might designate, to proceed with the negotiations.

In accordance with a resolution of the General Conference of the Methodist Episcopal Church, South, Bishop George F. Pierce, representing the bishops of that body, and the bishops of the Colored Methodist Episcopal Church met at Atlanta, Ga., in August, as a joint committee to take action for organizing an institution of learning for the Colored Methodist Episcopal Church. The committee elected a board of trustees composed of white and colored men, and representing the two churches, for the proposed institution, and decided that it should be established at Augusta, Ga. The board of trustees thus appointed met at Augusta in October, and decided that the new school should be called "Paine Institute," in honor of the late Bishop Robert Paine, of the Methodist Episcopal Church, South. An offer to serve as president of the institution was received from the Rev. Morgan Callaway, D. D., Vice-President of Emory College, Oxford, Ga., and



Professor of the English Language in that institution, and he was elected to the position.

IV. FREE METHODIST CHURCH.—This Church includes 271 itinerant ministers, 328 local preachers, and 12,642 members.

The sixth *General Conference* of the Free Methodist Church met at Burlington, Iowa, October 11th. B. T. Roberts presided. Delegates were present from fourteen annual conferences. A proposition to extend the pastoral term for three years was discussed, and defeated.

V. METHODIST EPISCOPAL CHURCH IN CANADA.—This Church has one bishop, three annual conferences (the Niagara, Ontario, and Bay of Quinte Conferences), 265 ministers, and 27,657 members.

The *General Conference* of the Methodist Episcopal Church in Canada met at Hamilton, Ont., August 23d. A plan of lay delegation having been adopted and ratified, went into effect at this Conference, and in accordance with it the lay delegates attended and took part in the proceedings. The most important subject considered was that of the union of the Methodist churches of the Dominion, upon which resolutions were adopted expressing gratification that the proposition for a general union was under consideration, and a willingness to make reasonable concessions to secure it. A committee of eighteen members was appointed, to confer with similar committees of other Methodist bodies, and negotiate for a union with any or all of them. A proposition to allot presiding elders to pastoral stations was laid on the table till the next General Conference.

VI. METHODIST CHURCH OF CANADA.—The statistical reports of this Church for 1882 show that it has 1,192 itinerant ministers, 1,338 local preachers, and 125,420 members.

The third *General Conference* of the Methodist Church of Canada met at Hamilton, Ont., in September. The Rev. Dr. S. D. Price was chosen president. The subjects of establishing a general superintendency for the whole Church, and of introducing lay delegations, were brought forward, in consequence of the pendency of negotiations for union with the other Methodist churches of the Dominion. The Methodist Episcopal Church, while it was ready to surrender the life-term principle, and other particular features of its episcopacy, insisted on the preservation in the united Church of the principle of an itinerant general superintendency. The Primitive Methodist and Bible Christian Churches were willing to accept a general superintendency, but insisted on the representation, in some form, of the laity in the annual conferences. A proposition was accordingly considered that the President of the General Conference should be *ex officio* constituted a General Superintendent, the privilege and duties of whose office should be to hold office during the four years from one regular General Conference to another; to preside

over all sessions of the General Conference during his term of office; to be chairman of all stationary committees; to travel at large in this connection as the General Conference may direct, and be relieved of all circuit duties; to attend as many annual conferences as possible, and bring before them matters of denominational interest; to rule on questions of law submitted to him; to arrange with the presidents of annual conferences for transfers of ministers; and to organize new annual conferences when directed by the General Conference to do so. A resolution was adopted, proposing an amendment to the provision in the Discipline of the Church respecting the election of the President of the General Conference, so as to provide for an itinerant general superintendency in some form. The Conference also resolved that the principle of lay representation in all church courts be so recognized as to admit lay representation into the annual conferences in some form; and that while the General Conference "is not aware of any general desire among the members of the Methodist Church of Canada for lay representation in the Annual Conference, yet it agrees, in order to promote union, to concede the principle, provided no change is made in regard to the examination of ministerial character, or the composition of the stationing committee." A committee of twenty-seven ministers and laymen was appointed to meet the committees of the other Methodist churches, with the provision that whatever basis of union might be adopted by the joint committees should be submitted to the Quarterly Boards for approval in February, when, if two thirds of the Quarterly Boards vote in the affirmative, the General Conference shall be convened to give effect to the basis of union.

PROPOSED UNION OF THE METHODIST CHURCHES IN CANADA.—Committees, appointed by the conferences of the Methodist, Methodist Episcopal, Primitive Methodist, and Bible Christian Churches of Canada, met in Toronto in September, to consider the question of a union of the bodies. Seventy-one members were present. The Discipline of the Methodist Church was taken up as the basis with reference to which propositions should be made and objections offered, and was considered in its several features. The Primitive Methodist and Bible Christian Churches insisted that the principle of lay representation in the annual conferences should be retained, but were willing to make concessions in details and as to forms. The representatives of the Methodist Episcopal Church insisted upon the retention of a general superintendency, although they were ready to give up the name of bishop and the life-term, and they proposed that the term of office of the General Superintendent should be twelve years. The representatives of the Methodist Church were not ready to assent to this proposition, although otherwise the features both of a gener-

al superintendency and of lay delegation were generally concurred in. As the General Conference of the Methodist Church was then in session, it was thought best to wait, before proceeding further, till that body had discussed the points in question. The joint committee accordingly adjourned, to meet again in November. The joint committee met again in Toronto, November 28th. Bishop Carman, of the Methodist Episcopal Church in Canada, was chosen president of the meetings. The only questions about which any difference of opinion was manifested were those of lay delegation and the itinerant general superintendency. Provision was finally made for equal representation of the laity with the ministry in the annual conferences; the lay delegates to have the right to speak and vote on all questions except the examination of ministerial character, the reception and ordination of probationers into full connection, and the granting of the superannuated or supernumerary relation. It was also agreed that ministers and laymen shall vote separately when electing their representatives to the General Conference. The following provision for the office of a General Superintendent was adopted:

1. There shall be one or more General Superintendents elected by the General Conference, to hold office for the term of eight years; but if it be decided at the meeting of the General Conference, after union, to elect two superintendents, one of them shall be elected for four years only, so that there may be a recurring election or elections every four years.

2. The General Superintendent shall preside over all sessions of the General Conference, and over all standing committees of the same.

3. The General Superintendent, when present, shall open the Annual Conference, and preside therein during the first day of its sessions, and afterward alternately with the President-elect. In association with such President he shall conduct the ordination services, and they shall jointly sign the ordination parchments; but all other duties pertaining to the presidency of the Annual Conference shall be vested in the President elected by that body, and, in the absence of the General Superintendent, he shall conduct the ordination and sign the parchments.

Other articles were adopted, defining the constitutions of the Annual and General Conferences, and providing for the choice, by ballot in the Annual Conference, from among the ministers of the Conference within the district, of a district superintendent for each district, to whom the supervision of the district shall be committed. Questions were also disposed of concerning educational interests, church funds, the stationing committee of the annual conferences, and other matters of detail.

The United Church, if the union is completed, will have 1,624 itinerant ministers, 2,036 local preachers, and 168,881 members.

VII. WESLEYAN METHODIST CHURCH.—The following is the statistical statement of the British and Affiliated Conferences, as published in connection with the "Minutes of Conference" for 1882:

COUNTRIES.	Members.	On trial.	Ministers.	On trial.	Superannu- merary.
I. In Great Britain.....	398,754	40,653	1,549	81	279
II. In Ireland and Irish mis- sions.....	24,475	776	250	18	43
III. In foreign missions.....	89,369	12,984	348	198	16
IV. French Conference.....	1,769	126	*27	1	3
Total .....	509,367	54,489	2,124	298	341

The *Chapel Committee* reported to the Conference, in July, 1882, that the total sum of £230,388 had been contributed in Great Britain for chapel-building and other trust purposes during the year, and that the erections and enlargements would afford 25,562 additional sittings. The ordinary income of the fund had increased.

The Committee of the *Thanksgiving Fund* reported that, on July 12th, the amount promised to the fund was £303,600, and estimated the amount which it might be necessary to allow for loss of subscriptions at £10,000. The Committee of the *Metropolitan Chapel-Building Fund* reported that eight new chapels had been opened during the year in the metropolitan district; and that sixty-one chapels, each providing for one thousand persons, had been opened since the fund was started. The grants and loans amounted to £27,168. The Committee for the *Extension of Methodism in Great Britain* had received and considered 143 applications and made 123 grants, amounting to £1,940. Since it was instituted, this committee had made 538 grants of £33,843, in answer to 777 applications, whereby 89,876 additional sittings in chapels had been provided. The fund for the *Relief and Extension of Methodism in Scotland* amounted to £9,748. This fund was instituted to provide chapels and manses in Scotland; and it was stated that during twenty years the entire trust property in that country had been renewed, at a cost of £100,000. The income of the Theological Institution had been £11,544.

The Committee on Sunday-Schools reported the number of Sunday-schools to be 6,489, with 122,999 officers and teachers, and 829,666 scholars, 122,999 of whom were members of the society or on trial. There were 2,257 Bands of Hope, with 227,784 members. The total receipts of the *Home Mission and Contingent Fund* for 1882 amounted to £35,034, as against £34,210 in 1881. The committee was authorized to employ, in addition to district missionaries, ministers and lay agents for general evangelistic work in different parts of the connection.

The anniversary of the *Wesleyan Missionary Society* was held in London, May 1st. Mr. Henry John Atkinson presided. The total income of the society for the year had been £141,722, besides £10,074 which had been received from the Thanksgiving Fund toward the

\* The French ministers who are employed in the Channel Islands district are not included in these returns.



extinction of the debt. The expenditures had been £146,754, showing a deficiency of £5,031, which, with a previously undischarged indebtedness of £28,235, made the total deficiency in the accounts of the society £33,266. The Missionary Committee afterward reported, however, to the Conference that the debt had been extinguished. The following is the general summary of the missions under the immediate direction of the Wesleyan Missionary Committee and the British Conference in Europe, India, China, South and West Africa, and the West Indies, which was presented with the report of the society:

Central or principal stations called circuits.....	542
Chapels and other preaching-places, in connection with the above-mentioned central or principal stations, as far as ascertained.....	2,469
Missionaries and assistant-missionaries, including supernumeraries.....	549
Other paid agents, as catechists, interpreters, day-school teachers, etc.....	2,275
Unpaid agents, as local preachers, Sabbath-school teachers, etc.....	7,568
Full and accredited church-members.....	59,345
On trial for church-membership.....	12,983
Scholars, deducting those who attend both the day and Sabbath schools.....	97,754
Printing establishments.....	8

The most favorable reports were made from the South African missions, where all the colonial churches were self-supporting, and were now developing a desire to send missionaries among the aboriginal tribes; while the native converts, where opportunity had favored them, were not far behind the colonists in the essential elements of church growth. They had a ministry of great promise; they were showing themselves capable, under the guidance of the European missionaries, of managing their own affairs, and had displayed during the recent political troubles some rare qualities of Christian citizenship. The committee hoped, after it was relieved of the care of these churches, by setting them upon their own foundations, to extend its missions into the unoccupied territory in the Transvaal, Swaziland, and Pondoland.

The one hundred and thirty-ninth *Wesleyan Methodist Conference* met at Leeds, July 18th. The Rev. Charles Garrett was chosen president. The numerical returns of membership were presented, and showed the number of members of the society to be 393,754, with 40,653 on trial; 25,205 persons had ceased to be members during the year. The report showed 32,417 members in junior society classes, and a net increase of 12,798 full members. As at the previous Conference, more candidates made application for admission than could be received, so now twenty-four candidates had to be declined. The most important business was the consideration of the report on the revision of the Book of Offices, which had engaged the attention of committees and the Conference for eight years. The previous Conference had adopted the report of the committee, so far as concerned the Order of Morning Prayer and the forms for the administration of the Lord's Supper, the

solemnization of Matrimony, and the Burial of the Dead, but had referred the form of administration of Baptism to another committee, with instructions to report to the present Conference. The discussion in the Conference turned upon the form which should be given to the preamble of the service, and bore particularly upon the doctrine of baptismal regeneration—all implication of a sanction of which it was decided to exclude. The preamble was finally adopted as follows:

DEARLY BELOVED: Forasmuch as our Lord Jesus Christ gave commandment to his Church to make disciples of all nations, baptizing them in the name of the Father, and of the Son, and of the Holy Ghost, and whereas these persons here present do bring *this child*, and do now present *him* for holy baptism, let us, being gathered together in the name of Christ and in obedience to his command, hear for our instruction and encouragement the teaching of his Holy Word concerning this sacrament.

The new form, as reported by the committee, orders the four collects, which have heretofore been read immediately before the act of baptism, to be read after it, so that the prayers contained in them should not be interpreted as having reference to any regenerating influence attendant upon the act. Action was taken for the organization of the colonial and native churches of South Africa into a South African Conference, to which the parent conference relinquishes its missions; and the Rev. J. Walton was designated as the first president of the new conference. The subject of organizing a West Indian Conference was also considered.

VIII. PRIMITIVE METHODIST CHURCH.—The following is a summary of the statistics of this church as they were presented to the Conference in June:

Number of members.....	191,829
Number of ministers.....	1,152
Number of local preachers.....	15,273
Number of class-leaders.....	10,595
Number of connectional chapels.....	4,497
Number of rented chapels.....	1,851

The increase in the number of members from the previous year was 6,017. Reports were presented of 3,764 Sunday-schools in the United Kingdom, with 56,337 teachers, 364,592 scholars, and 62,121 members of the Connectional Band of Hope. The increase in Sunday-school scholars was 9,518. The income of the schools amounted to £50,150.

The anniversary of the Primitive Methodist Missionary Society was held May 16th. The receipts of the society had been £35,225, or £215 more than during the previous year, and an increase of 1,303 members was reported at the home and foreign stations and in the colonial districts. The society had the superintendence of 65 home-mission stations, 176 colonial, and 4 foreign stations, with 100 home missionaries, 205 colonial ministers and missionaries, and 6 foreign missionaries—in all 245 stations, with 1,227 preaching-places, and 311 missionaries. The foreign mission work is represented by stations at Aliwal North, South Africa, and Fernando Po, on the West

African coast. At the former place were 3 ministers, 11 local preachers, and 234 members of the church. The colonial work was in Australia and Canada. In the latter country were 61 stations and 97 missionaries, with 8,137 members.

The sixty-third Annual Conference of the *Primitive Methodist Connection* met at Sheffield, June 7th. The Rev. Joseph Wood was chosen president. Measures were approved for securing a more solemn and becoming observance of the ordinance of baptism, and to impress on the societies the obligations of the Church in relation to the baptized; also for securing a better attendance at Sunday-schools of the children who have been baptized in the chapels and by the ministers. A scheme for the formation of a Connectional Temperance League was referred, to be matured by a committee and considered by the next Conference. The Missionary Committee was authorized to give higher salaries to its missionaries on home stations that are regarded as especially important fields of labor, and where heavy responsibilities have to be accepted.

**IX. METHODIST NEW CONNECTION.**—The following is a summary of the statistics of this Church as they were reported to the Conference in June: Number of chapels, 512; of societies, 467; of circuit preachers, 186; of local preachers, 1,278; of members, 28,631; of probationers, 4,512; of Sunday-schools, 465, with 11,210 teachers and 80,897 scholars. The increase of members was 861, and of Sunday-school scholars, 1,429. An increase of 40 members was reported in China, and of 32 members in Ireland.

The Conference of the *Methodist New Connection* met at Batley, in June. The Rev. W. Longbottom was chosen president.

**X. UNITED METHODIST FREE CHURCHES.**—The following is a summary of the statistics of these churches, as they were reported to the Conference in July: Number of itinerant preachers, 392; of supernumeraries, 40; of local preachers, 3,385; of leaders, 4,186; of members in the society, 74,142; of probationers, 9,905; of chapels and preaching-rooms, 1,533; of Sunday-schools, 1,354, with 23,892 teachers and 199,382 scholars. The increase of members was 1,363, and of Sunday-school scholars, 3,425.

The annual meeting in behalf of the *Home and Foreign Missions* was held April 23d. The income of the society for the year had been £16,480. The society conducted twenty-four home missions, which were under the charge of twenty-two missionaries, and had in its foreign missions, in China, East Africa, and West Africa, fifty-one missionaries, with 7,772 church-members, 917 on probation, and 7,752 Sunday-school scholars.

The Annual Assembly of the *United Methodist Free Churches* met at Bristol, July 19th. The Rev. Arthur Hands was chosen president. The present being the twenty-fifth year since

the amalgamation, in 1857, between the Wesleyan Association and the Wesleyan Reformers, by which the present union of churches was formed, measures were taken to celebrate the anniversary by raising a commemorative or thanksgiving fund of £25,000 to be appropriated between the Connectional funds and local objects; and the Connectional Committee was authorized to prepare the details of a scheme for accomplishing this object, to be submitted to the next Assembly.

**MEXICO** (ESTADOS UNIDOS DE MÉXICO, OR REPÚBLICA MEXICANA). Mr. J. Y. Sargent, in an article, "Mexico and her Railways," in the London "Fortnightly Review," February 1, 1883, expresses himself about Mexico in the following terms: "Mexico occupies the southern portion of the North American Continent, narrowing southward to the Isthmus of Tehuantepec, and broadening toward the northwest and east with the breadth of the continent, through about fifteen degrees of latitude, until it reaches the boundary of the United States. This is an imaginary line, stretching from about San Diego, on the Pacific, to Matamoros, on the Gulf of Mexico. This line, running nearly 2,000 miles, divides Mexico from California, Arizona, and Texas. For the whole length of the Texan frontier it follows the Rio Grande River down to its mouth. Less than fifty years ago Mexico included California, Arizona, New Mexico, Nevada, Utah, Colorado, Southern Wyoming, and Texas; continuing, in fact, the high plateau which occupies the central part of Mexico, and which, widening northward, embraces the *mesa* of the Rocky Mountains as far north as the latitude of Salt Lake, where it is now crossed by the trunk line of the Union Pacific. This great table-land, although diversified with mountains and valleys, yet lies at an average altitude of about 5,000 feet above the level of the sea. Eastward it slopes gradually across the prairies, to the level of the Missouri and Mississippi. In Mexico proper it sinks by successive steps and steep escarpments to the lowlands that border on the Gulf of Mexico and California, and the Pacific.

"Being narrowed in the area of the Mexican States, and nearer the equator, the land presents in a smaller compass all the variety of climate and produce of the tropic, the temperate, and the colder zones. Hence the well-known division of Mexico into the *tierras calientes*, *tierras templadas*, and *tierras frias*. A glance at the map will show that the States nearest the capital are the most thickly peopled. Tlascala, Morelos, Hidalgo, Querétaro, Guanajuato, Zacatecas, and San Luis Potosí are studded with names of towns which become more sparse toward the north and north-west."

**AREA AND POPULATION.**—Mr. Lorenzo Castro's hand-book, entitled "The Republic of Mexico in 1882," contains the statistics of area and population as follows:



NAMES OF STATES.	Area in leagues.	Population.	Capitals.	Population.
Aguas Calientes.....	827	139,800	Aguas Calientes.....	35,000
Campeachy.....	3,801	120,815	Campeachy.....	26,000
Chiapas.....	2,474	205,000	San Cristobal las Casas.....	10,205
Chihuahua.....	14,300	220,000	Chihuahua.....	16,000
Coahuila de Zaragoza.....	9,500	125,400	Saltillo.....	17,000
Colima.....	552	65,827	Colima.....	81,774
Durango.....	6,391	200,000	Durango.....	28,000
Guanajuato.....	1,862	889,575	Guanajuato.....	68,000
Guerrero.....	3,564	325,000	Chilpancingo.....	8,000
Hidalgo.....	1,521	404,207	Pachuca.....	15,000
Jalisco.....	7,225	984,850	Guadalajara.....	98,875
Mexico.....	1,416	607,485	Toluca.....	11,876
Michoacan.....	3,497	618,240	Morelia.....	25,000
Morelos.....	262	150,800	Cuernavaca.....	12,000
Nuevo Leon.....	4,036	201,732	Monterey.....	40,000
Oajaca.....	4,953	733,556	Oajaca.....	26,708
Puebla.....	1,733	734,466	Puebla.....	76,817
Querétaro.....	506	154,000	Querétaro.....	48,000
San Luis Potosi.....	4,262	650,000	San Luis Potosi.....	45,000
Sinaloa.....	5,950	200,000	Cullacan.....	7,000
Sonora.....	11,655	141,000	Ures.....	5,000
Tabasco.....	1,876	104,759	San Juan Bautista.....	8,000
Tamaulipas.....	4,428	120,000	Matamoros.....	25,000
Tlascala.....	253	138,988	Tlascala.....	36,463
Vera Cruz.....	3,501	552,918	Orizaba.....	20,000
Yucatan.....	4,818	422,365	Mérida.....	56,000
Zacatecas.....	6,270	470,000	Zacatecas.....	62,000
Lower California (Territory).....	8,727	80,000	La Paz.....	4,000
Federal District of Mexico.....	50	815,916	Mexico.....	225,000

Total area of States in leagues, 119,710.

Total population, 10,025,649.

The proportion of the Mexican league to the English or American mile is fifty to nineteen.

Of this population of 10,000,000, according to the most probable estimates, 6,500,000 consist of Indians of various tribal descent, the Aztecs being only a small portion of the number, and of the remaining 3,500,000 at least 3,000,000 are half-breeds, or are mixed with Indian blood in some proportion, leaving only about 500,000 inhabitants of wholly white descent.

Mr. Sargent (above referred to) resumes as follows: "For many years before and since the intrusion of Maximilian, Mexico was a prey to revolutions. These have gradually ceased. Under the *régime* of the existing President, Gonzalez, and his predecessor, Diaz, there has been no political disturbance of any moment. The thoughts of all classes, tired of continual change, have been directed to social and material improvement; the name of a stable government is daily more and more appreciated, and public opinion is so firmly set in favor of a continuance in the present path of tranquillity and progress that there would seem to be but little fear of a recurrence of revolutions. It was the knowledge of this improved state of things that persuaded the wide-awake people of the United States that the time had come for opening up Mexico to American commerce. Enlightened Mexican statesmen like Diaz and Romero were found ready to respond, and showed a desire to encourage the introduction of American trade and American capital into the country. But public opinion had to be educated up to the mark, and time had to be allowed for the expansive force of American commerce, working, as by an inevitable law, to force its way into Mexico, when the providing of railways would be proved to be

an absolute necessity. Accordingly, events brought on the time."

STATE VALUATION.—A Government estimate, taken in 1880, gives the following figures of assessed valuation of real estate and export of precious metals:

STATES.	Real estate.	Gold and silver export.
Coahuila.....	\$2,950,693	
Guanajuato.....	30,062,994	\$4,118,632
Hidalgo.....	19,077,139	3,734,987
Jalisco.....	24,793,322	1,600,917
Mexico.....	22,598,918	348,446
Michoacan.....	20,849,385	287,626
San Luis Potosi.....	18,553,656	3,053,110
Zacatecas.....	15,615,652	4,592,098
Lower California.....	7,598,632	
Rest of Mexico.....	\$151,040,441	\$17,685,816
	187,561,447	4,217,613
Grand total.....	\$388,901,888	\$21,903,429

PUBLIC OFFICERS.—The President of the Republic is General Manuel Gonzalez, whose term of office will expire on December 1, 1884. His Cabinet is composed of the following ministers: Secretary of Foreign Affairs, Señor J. Mariscal; Interior, C. Diez Gutierrez; Justice and Instruction, vacant; Finance, F. Landero y Cos; Public Works, General C. Pacheco; War, General E. Naranjo. Supreme Court, President (and Vice-President of the Republic), Señor J. L. Vallarta, and the magistrates are: P. Ogazon, J. de Mata Vasquez, M. Alas, M. Blanco, J. M. Bantista, M. Saldana, E. Avila, P. Ortiz, J. M. Vasquez Palacios, J. F. Corona, M. Auza, and M. Rojas; with J. E. Muñoz, Attorney-General, and E. Ruiz, Procurator-General.

GOVERNORS OF STATES.—Aguas Calientes, R. Arellanos; Campeachy, A. Shields; Coahuila, E. Madero; Colima, F. Santa Cruz; Chiapas,

M. Utrilla; Chihuahua, L. Terrazas; Federal District, R. Fernandez; Durango, F. G. de Palacios; Guanajuato, M. Ledo; Guerrero, General D. Alvarez; Hidalgo, S. Craviato; Jalisco, P. Landazurri, *ad interim*; Mexico, J. Zabieta; Michoacan, P. Dorantes; Morelos, C. Quaglia; Nuevo Leon, G. Garza Garcia; Oajaca, General Porfirio Diaz; Puebla, General Mendez; Querétaro, F. G. Cosio; San Luis Potosi, P. Diaz Gutierrez; Sinaloa, M. Castro; Sonora, C. Ortiz; Tabasco, M. Foucher; Tamaulipas, A. Canales; Territory of Lower California, General J. M. Rangel; Tlascala, Grajales; Vera Cruz, A. Castillo; Yucatan, General Rosada; and Zacatecas, General Aréchegui.

The Governors of States are elected for a term of four years. The Governor of the Territory of Lower California is appointed by the Federal Government.

The army in 1882 was composed as follows:

	Officers.	Men.
Infantry (20 battalions).....	740	12,200
Cavalry (14 regiments).....	515	4,850
Artillery (6 brigades, each of 5 batteries) ..	380	1,645
Coast guards.....	22	71
Rural guards.....	150	1,692
Invalids.....	19	280
Total.....	1,629	20,738

The navy consists of four gunboats. The national and State finances, as shown by the budget estimates for the current year, exhibit the following details:

REVENUE.		Budget of 1882-'83.
Custom-house.....		\$15,000,000
Custom-house at Mexico and town dues.....		2,000,000
Stamp dues.....		4,000,000
Direct taxes.....		900,000
Mint.....		60,000
Instruction Fund.....		60,000
Post-Office and telegraphs.....		650,000
Lottery.....		800,000
New tobacco and stamp taxes.....		2,000,000
Sundry incomes.....		1,000,000
Income of the individual States.....		7,500,000
Grand total.....		\$34,600,000
EXPENDITURE.		
The Legislature.....		\$1,071,712
The Executive.....		48,832
Supreme Court.....		389,554
Foreign Affairs.....		336,280
Interior.....		3,285,118
Justice and Public Instruction.....		1,215,473
Public Works.....		7,551,683
Finance.....		4,045,877
Army and Navy.....		8,514,473
Expenditure in the different States.....		7,500,000
Grand total.....		\$34,511,507

The city expenses of 1,411 municipalities, amounting in the aggregate to about \$7,000,000, are covered by local taxes.

The foreign debt embraces the following items: English loan of October 14, 1850, \$89,252,360; agreement of indebtedness to English bondholders of December 4, 1851, \$5,900,025; ditto to Spanish, of December 6, 1853, \$1,231,775; ditto, ditto, of November 12, 1853, \$5,553,287; debt to the United States of July 4,

1868, \$2,775,123; together, \$104,712,570; ditto, internal, \$40,241,215; grand total, \$144,953,785.

THE CHIEF RAILROAD LINES.—Among the multitude of companies or individuals possessing "concessions" for railroads from the Mexican Federal Government, all may be discarded at the present moment from consideration in this inquiry except three:

1. The Mexican Central Railroad Company, whose main line is planned to reach from the city of Mexico to Paso del Norte, on the American frontier, running northward through the States of Mexico, Hidalgo, Querétaro, Guanajuato, through a corner of the State of Jalisco, and through the States of Aguas Calientes, Zacatecas, Durango, and Chihuahua, with lateral lines from the neighborhood of the cities of Leon or Lagos or Aguas Calientes to San Blas, on the Pacific coast, and to the neighborhood of Tampico, upon the Gulf of Mexico. The main line of this road follows pretty nearly the central line of the *tierra fria* northward from the capital. In Humboldt's "Views of Nature" the extraordinary facilities of part at least of this route for railroad-building were indicated many years ago by a table he compiled of "the line of leveling from the city of Mexico to Santa Fé," comprising the following altitudes of cities which are on its route: Mexico, 7,469 feet; Tula, 6,733; San Juan del Rio, 6,490; Querétaro, 6,362; Celaya, 6,017; Salamanca, 5,761; Silao, 5,911; Guanajuato (which the Mexican Central reaches by a branch road from Silao), 6,836; Leon, 6,133; Lagos, 6,376; Aguas Calientes, 6,261; Zacatecas, 8,038; Fresnillo, 7,244; Durango, 6,848; Chihuahua, 4,638, and Paso del Norte, 3,810.

2. The Mexican National Railroad Company, whose main line is planned to reach from the city of Mexico to Laredo, on the American frontier, running first westward to Toluca, then turning northward through the towns of Maravatio and Acambaro, crossing the Central road at Celaya and extending to Laredo by way of the cities of San Luis Potosi, Saltillo and Monterrey—traversing the States of Mexico, Michoacan, Guanajuato, San Luis Potosi, a corner of Zacatecas, Nuevo Leon, and Coahuila, with a central line branching off at Acambaro and running to Manzanillo on the Pacific. The elevations of the cities of Saltillo and San Luis Potosi above the sea are given by Humboldt as respectively 5,240 and 6,090 feet. That of the city of Toluca he gives in "Cosmos" as 8,825 feet.

3. The Mexican Railroad Company, whose main line reaches from the city of Mexico to the city of Vera Cruz, running through the cities of Apam, Huamantla, Maltrata, Orizaba, and Córdoba, and traversing the States of Mexico, Tlascala, Puebla, and Vera Cruz.

The Mexican Railroad has been running throughout its whole line from Vera Cruz to the capital, 263 miles, since the year 1873, with a branch line, twenty-nine miles long,



from Apizaco (eighty-six miles from the capital and 177 miles from Vera Cruz) to the city of Puebla. It is a "standard gauge" road, was built chiefly with English capital, and is controlled in London. Its president, however, is an American. Its distinctive peculiarity—in which it differs from the two other roads which have been mentioned—is that it traverses all three of the climatic belts of Mexico, while their routes are in only the *tierra fria*. At Paso del Macho, in the *tierra caliente*, forty-seven miles from Vera Cruz, the work ahead is indicated by the substitution of a Fairlie for a Baldwin locomotive on the train. From this station during the next sixty miles the road mounts through the *tierra templada*, across the terraces of Córdoba and Orizaba, up to Boca del Monte, 8,310 feet above the sea, and thence follows the table-land 156 miles to the city of Mexico. The magnificent scenery and engineering of these sixty miles have long been familiar to Americans by photographs and written narratives. It would be trite, therefore, to descant upon them. They are unrivaled, except by the engineering and scenery of the present route of the Mexican National Railroad from the capital to the city of Toluca.

The main line of the Mexican Central road is completed from the north only so far that trains are running regularly from El Paso to Chihuahua, about 225 miles, and from the south only so far that they are running regularly 286 miles, from the city of Mexico to Lagos, to which extreme point they began to run on December 15, 1882. Between Lagos and Chihuahua there is, therefore, a gap of five or six hundred miles, which must be traversed at present by "diligence." This gap is so extensive that it prohibits the line from becoming a convenient means of access to the capital at present. The Mexican "diligence," or stage-coach, is a very uncomfortable vehicle, built on the pattern of the old-fashioned "Concord coaches," and is as dirty as it is uncomfortable. The highways are very rough, and, although the relays of mules are frequent, a speed of more than forty or fifty miles a day can not reasonably be expected.

The Mexican Central road is of the "standard gauge." Its American connections are with the Atchison, Topeka, and Santa Fé Railroad system—a fact which sufficiently identifies its American control to anybody acquainted with the subdivisions of American railroad interests. Its Mexican controllers are men in close and peculiar relations with the Federal Executive.

The main line of the Mexican National road is completed from the north only so far that trains are running regularly from Laredo to Monterey, and from the south only so far that they are running from the city of Mexico through Toluca, forty-seven miles (to which point they began to run in September, 1882), to Maravatio, ninety-six miles farther, to which

point it is said that they began to run regularly during the month of February, 1883.

The gap in which resort must be had to the "diligence" in this line, therefore, is nearly as extensive at present as exists in the case of the Central road. Nor does the section completed from the city of Mexico westward and northward help at all to fill it, even if that section be reckoned to extend as far as Maravatio, 143 miles. Nor can it do so until after the Central road is crossed at Celaya. The reasons for this are evident by a glance at the map, without discussion. A traveler by "diligence" down from Monterey will of course aim to strike the Mexican Central road at Lagos and use it to the capital. As a main avenue of travel between our country and the city of Mexico the location of the southern part of the Mexican National Railroad is highly advantageous compared with the location of the Central road; while, on the contrary, for that purpose, the location of its northern part possesses some striking advantages.

The Mexican National Company owns also another strip of rail, which is laid northward out of the valley of Mexico by the side of the Central Railroad, some thirty miles to the village of El Salto, availing itself of the easy grades of exit from the valley afforded by the old "Spanish Drain." From El Salto numerous surveys have been made with a design to connect this strip with Toluca, in which event the monstrously expensive road that this company has constructed directly westward from the capital to that city (with grades some of which were stated by one of the engineers, who went over it in company with the writer in January, to be as steep as 3·8 in 100 feet) would doubtless be discontinued as the main line, and the El Salto route substituted. But these surveys were fruitless. It is now asserted, however, that a later survey has been successful in finding a way to make the connection with grades not exceeding 1·5 in 100 feet.

The Mexican National road is of the "narrow gauge." Its American connections are with the Denver and Rio Grande railroad system.

ACCESS BY SEA ON THE PACIFIC SIDE.—On the Pacific side steamers land passengers from San Francisco at San Blas, in the State of Jalisco. Thence it is possible to reach the Mexican Central Railroad at Lagos or Leon by a seven and a half days' journey by "diligence" through the cities of Tepic and Guadalajara. From Lagos to the city of Mexico by rail it is, as has been mentioned, about 286 miles. From Leon to the city of Mexico the distance is 266 miles.

As soon as the Mexican Central road pushes its lateral line from Leon or Lagos to Guadalajara it will greatly facilitate the approach from this quarter.

ACCESS BY SEA ON THE ATLANTIC SIDE.—On the Atlantic side there is a weekly "Alexandre" steamer from New York for Vera Cruz (starting from pier 3 North River on Thurs-

days), touching on the way at Havana, in Cuba, and Progreso, in the Mexican State of Yucatan, and on alternate weeks also at Campeachy, in the State of the same name, and Frontera, in the State of Tobasco. The distances by this route are as follow :

	Miles.
New York to Havana.....	1,200
Havana to Progreso.....	425
Progreso to Campeachy.....	123
Campeachy to Frontera.....	133
Frontera to Vera Cruz.....	200
Total.....	2,086

From Havana there are also British, French, and German steam lines running to Vera Cruz, to any of which a traveler may shift his passage if he desires. Or he may go from New York to Havana by the "Ward" line of steamers, which start from pier 16 East River weekly, on Saturdays, and there shift his passage to Vera Cruz either to an Alexandre boat or to one of these foreign lines.

All the Ward and Alexandre steamers from New York are commodious—those of recent build especially so—and are run with reasonable regard to the comfort of passengers. Their size in general is about 2,500 tons old measurement.

There is also an Alexandre steamer from New Orleans for Vera Cruz once in three weeks. This steamer touches, between New Orleans and Vera Cruz, at the Mexican ports of Bagdad (at the mouth of the Rio Grande, where passengers are taken from or left for Matamoros) and of Tampico and Tuxpan.

The distances from New Orleans to Vera Cruz by this route are as follow :

	Miles.
New Orleans to Bagdad.....	573
Bagdad to Tampico.....	225
Tampico to Tuxpan.....	90
Tuxpan to Vera Cruz.....	125
Total.....	1,013

There is also a "Morgan" line steamer from Morgan City, formerly called Brashear City (reached by rail in a few hours from New Orleans), for Vera Cruz twice a month, touching on the way only at Galveston, in Texas. This is an iron boat, flat-bottomed and a "side-wheeler." All the other boats above mentioned are propellers. It has lately been published that all the Morgan steam lines, including this one, have been purchased in an interest connected with the Central Pacific and Southern Pacific Railroads and with a Mexican "concession," as yet unimproved, for a railroad toward the Mexican capital, starting from the Texas frontier at a point on the Rio Grande north-west of Laredo.

In its issue of January 16, 1883, the Mexican correspondent of the London "Times" thus expresses himself about railroads in Mexico :

Railroads are naturally expected to do much for Mexico, where absence of navigable rivers and water for canals has hitherto necessitated the tedious movement of all goods by ox-team or on the back of the useful *burro*. Already charters have been granted for some 5,000 miles of road, which will cost on an average for

construction and equipment \$25,000 per mile. The United States and foreign countries are finding the money, which would augur that the Mexicans have either very little enterprise, or are doubtful of the success of such undertakings. Nearly 1,000 miles have already been built. The line from the seaport of Vera Cruz to the city of Mexico, covering with its branches 365 miles, has been opened since 1873. The tardiness of the people of Mexico to take advantage of improved transport facilities is illustrated by the fact that the increase of business since the road was opened has been about one per cent per annum, while, although possessing a monopoly and a Government subsidy, the company earned no dividend until last year, when 5 per cent was declared. If the road from the capital of the republic to its principal seaport has taken eight years to develop profitable traffic, there is poor prospect of much profit from lines running through more sparsely populated, poorer regions. Years must elapse before there is much agricultural, manufacturing, or mineral produce to be carried by Mexican railroads, or before the amplified wants of the masses will fill many freight-cars. Before railways can prosper the country, moreover, must become more peaceful and settled. It seems almost incredible that on the Vera Cruz road a car full of soldiers accompanies each train, and at every station soldiers are drawn up awaiting the arrival of each train. These precautions are adopted regularly, even when no specie is being transported. On the Mexican Central, running south from Paso del Norte, 225 miles, to Chihuahua, the traveling officials are all armed, but no military accompany the train. Government subsidizes several Mexican lines to the extent of about one third of the cost of construction, but this, although enabling the road to dispose of its bonds advantageously in foreign markets, is hampered by unfavorable regulations as to freight charges and transport of Government officials and munitions of war.

I have not visited the southern portions of the republic, the Mexican Gulf shores, where tropical produce can be raised, whence much tobacco is brought, and where malarial fevers abound. I have not seen the fertile, extending coffee plantations, still free from parasitic attacks, nor the great silver-mines, nor the larger cities. My observations have been confined to the northern portion of the country, which has obviously been the basin of a great sea, in the midst of which towered the old granitic mountains, standing out then as shallows or islands, now mapping the region into great valleys, some of them 100 miles long and five to 50 miles wide; several of the later-drained flats for miles covered with so much saline deposit as entirely to prevent vegetation. The Mexican Central Railroad, from its northern start on the borders of Texas, for upward of 150 miles passes through a poor sage-brush country, diversified by immense sand-hills and barren alkaline plains, broken with *mesas*, and flanked by a succession of gneissic mountains 1,000 feet to 2,000 high, from the fastnesses of which Indians and white desperadoes were wont to sally forth and rob and murder occasional travelers, railroad surveyors and constructors. The Candelero Pass was pointed out to me, where, twelve months ago, twenty-seven Mexicans in pursuit of a marauding band of Apaches, were inveigled into a defile and cut down to a man. On the waysides, along many a mountain-path, are crosses where prospectors and cattle-men have been shot for plunder or revenge. No wonder that the population invariably carry fire-arms, and always have them handy by night as well as by day. Toward Chihuahua there is less alkali and sand and more water, settlement, irrigation, cultivation, and stock-keeping. The town contains about 7,000 people, and consists of one and two storied adobe houses, with flat roofs, cheaply and quickly built, keeping out both heat and cold, but, unless some attention is paid to cleanliness, affording harbors for centipedes, tarantulas, and other vermin. An imposing cathedral and several churches of the same simple material were erected nearly 800 years



ago, and have since been maintained in good order and endowed by a tax of one per cent on the neighboring mines. The advent of the railroad in September has somewhat awakened Chihuahua from her quiet stagnation: it has brought visitors from all parts of the United States. The Mexican and Indian populations still appear fascinated by the locomotives, and examine them to discover the concealed animals which they believe must furnish the motive power; while still another problem exercises some simple minds—how, when the train is backed, the cars draw the engine.

On the other hand Mr. Romero, the Mexican Minister at Washington, in a speech delivered by him on February 12, 1883, on the occasion of a banquet tendered him by the merchants there, alluded to Mexican railroads in the following terms:

As for the net earnings of railroads in my country, I may state that the Vera Cruz line was inaugurated on January 1, 1873, when its net earnings amounted to \$826,000, while they reached \$2,958,729 in 1881, and nearly \$4,000,000 last year. This railroad cost twice the amount of the present cost of construction; its bonded debt is \$40,000,000, and its shares, which three years ago had not reached par, now sell at 143 per cent, in consequence of the dividends the road pays. And this result has been obtained in spite of the high rates this railroad charges, almost prohibitive as they are, for the freight per mile is 24 to 30 cents per ton. Something similar we shall witness with respect to other railroads in Mexico, provided they shall have been well planned and economically built. As wages and land are cheap in Mexico, and all material enters duty free, they can be built comparatively cheap.

**POSTAL SERVICE.**—The postal service was carried on in 1881 by 873 post-offices, 51 of which were general, 244 branch-offices, and 573 minor local ones. The number of letters forwarded, 4,406,410, besides 55,123 registered ones, 2,693,257 newspapers, and 133 packages of samples. Postage-stamps sold produced \$491,309.

**TELEGRAPHS.**—There were in operation in 1881, 10,486 kilometres, or 6,606 miles, of telegraph belonging to the Federal Government; 1,484 kilometres, or 935 miles, to individual States; 3,502 kilometres, or 2,206 miles, to private companies; 715 kilometres, or 450 miles, to railroad companies; and 875 kilometres, or 551 miles, of cables; together, 17,062 kilometres, or 10,748 miles. Number of offices, 363; number of telegrams forwarded, 744,917; net earnings, \$399,814.

**EXPORTS AND IMPORTS.**—The foreign trade movement in 1879-'80 shows the ensuing items of export:

Silver.....	\$19,823,897
Gold.....	1,180,815
Copper.....	48,692
Ores.....	483,587
Dye and cabinet woods.....	1,597,599
Other products.....	9,529,435
<b>Total.....</b>	<b>\$32,663,525</b>

**COUNTRIES WHERE SHIPPED TO.**

United States.....	\$13,416,600
United Kingdom.....	11,087,594
France.....	5,194,741
Germany.....	1,498,734
Spain.....	1,009,868
Spanish America.....	506,488

**Total.....** \$32,663,525

In 1875-'76 the imports amounted to \$28,485,000, while the exports only reached \$25,435,000, \$15,000,000 of the latter amount being silver.

The marine movement in 1874-'75 was as follows:

FLAG.	Vessels.	FLAG.	Vessels.
Mexican.....	2,227	Norwegian.....	48
American.....	332	Danish.....	38
English.....	162	Dutch.....	12
French.....	115	Other nationalities.....	26
German.....	112		
Spanish.....	64	<b>Total.....</b>	<b>3,181</b>

Total tonnage entered, 1,000,000.

The Mexican merchant navy embraces 421 sea-going vessels and 847 coasting-craft.

The United States imported from Mexico the following amounts of merchandise:

FISCAL YEARS.		FISCAL YEARS.	
1858.....	\$1,103,501	1868.....	\$1,590,667
1859.....	1,244,084	1869.....	2,336,164
1860.....	1,908,431	1870.....	2,715,665
1861.....	886,112	1871.....	3,209,688
1862.....	817,809	1872.....	4,002,920
<b>Total.....</b>	<b>\$5,959,937</b>	<b>Total.....</b>	<b>\$13,355,104</b>
1863.....	\$3,043,882	1873.....	\$4,276,165
1864.....	6,128,445	1874.....	4,346,364
1865.....	6,220,874	1875.....	5,174,594
1866.....	1,726,092	1876.....	5,150,572
1867.....	1,071,986	1877.....	5,204,264
<b>Total.....</b>	<b>\$18,191,229</b>	<b>Total.....</b>	<b>\$24,151,959</b>

**FISCAL YEARS.**

1878.....	\$5,251,502
1879.....	5,493,221
1880.....	7,209,593
1881.....	8,817,892
1882.....	8,461,599

**Total.....** \$34,784,017

During the last quinquennial period, the United States imported from Mexico, besides, the ensuing amounts of specie (nearly all silver):

**FISCAL YEARS.**

1878.....	\$8,394,146
1879.....	8,654,598
1880.....	9,115,824
1881.....	9,136,824
1882.....	6,631,938

**Total.....** \$41,832,380

In other words, during the last quinquennial period the import of specie from there was 20 per cent larger than that of merchandise.

The domestic merchandise export from the United States to Mexico, during the past twenty-five fiscal years, is shown below:

1858.....	\$3,312,825	1868.....	\$6,441,839
1859.....	2,919,742	1869.....	4,838,107
1860.....	5,324,713	1870.....	5,850,700
1861.....	2,210,426	1871.....	7,612,118
1862.....	2,181,174	1872.....	5,543,589
<b>Total.....</b>	<b>\$15,948,880</b>	<b>Total.....</b>	<b>\$30,330,843</b>
1863.....	\$9,020,624	1873.....	\$6,264,901
1864.....	9,270,597	1874.....	5,946,839
1865.....	16,350,839	1875.....	5,737,282
1866.....	4,573,218	1876.....	6,200,572
1867.....	5,395,796	1877.....	5,593,494

**Total.....** \$44,611,074

**Total.....** \$30,043,088

1878.....	\$7,460,704
1879.....	6,762,244
1880.....	7,566,498
1881.....	11,171,238
1882.....	13,024,505

**Total.....** \$46,975,184

## IMPORT OF MERCHANDISE INTO THE UNITED STATES, THE UNITED KINGDOM, AND FRANCE FROM MEXICO, AND EXPORT FROM THOSE COUNTRIES TO MEXICO.

YEARS.	THE UNITED STATES.		THE UNITED KINGDOM.		FRANCE.	
	Import.	Export.	Import.	Export.	Import.	Export.
1859.....	\$1,244,084	\$2,919,742	\$1,851,747	\$2,150,368	\$510,600	\$3,388,900
1860.....	1,908,481	5,324,713	2,590,527	2,622,795	849,200	3,353,200
1861.....	886,112	2,210,426	1,691,250	3,177,158	849,200	8,416,100
1862.....	817,809	2,181,174	3,014,836	3,975,298	752,700	3,956,500
1863.....	3,043,882	9,020,624	11,165,891	8,510,448	945,700	4,284,600
1864.....	6,128,445	9,270,597	15,228,904	10,864,588	1,177,200	13,645,100
1865.....	6,220,874	16,850,889	15,655,161	9,574,299	1,100,100	13,645,100
1866.....	1,726,092	4,573,218	1,525,541	6,484,681	733,400	10,267,600
1867.....	1,071,986	5,395,736	1,583,765	4,333,297	628,746	8,826,648
1868.....	1,590,667	6,441,889	1,706,506	4,341,293	1,093,671	4,579,276
	\$24,638,332	\$63,638,468	\$55,763,628	\$57,084,165	\$8,940,517	\$64,618,024
1869.....	\$2,336,164	\$4,868,107	\$1,706,049	\$3,394,146	\$1,472,485	\$3,215,282
1870.....	2,715,665	5,559,700	1,459,040	5,149,330	1,159,493	2,909,211
1871.....	3,209,688	7,612,113	1,938,626	5,927,524	1,024,357	2,942,038
1872.....	4,002,920	2,543,589	2,158,410	4,377,602	1,461,485	4,358,094
1873.....	4,276,165	6,264,901	2,430,972	6,715,152	1,192,067	5,640,719
1874.....	4,846,864	5,946,589	2,660,277	6,437,776	1,459,625	4,354,768
1875.....	5,174,594	5,737,282	3,513,160	4,772,654	2,380,647	4,674,258
1876.....	5,150,572	6,200,572	3,222,265	2,807,065	2,068,189	2,865,547
1877.....	5,204,264	5,893,494	3,887,688	5,215,501	1,238,689	4,984,880
1878.....	5,251,502	7,460,704	2,467,715	4,184,937	1,233,222	6,295,512
	\$41,667,898	\$58,402,801	\$25,439,152	\$48,921,737	\$14,675,154	\$42,185,599
1879.....	\$5,493,221	\$6,752,244	\$2,835,997	\$3,724,133	\$1,537,156	\$5,143,859
1880.....	7,209,593	7,866,493	3,056,508	5,964,222	1,675,593	6,054,960

## RECAPITULATION (MERCHANDISE).

*Import from Mexico.*

Into the United States, 1859-'80 inclusive.....	\$79,004,044
Into the United Kingdom, 1859-'80 inclusive....	87,005,285
Into France, 1859-'80 inclusive.....	26,828,720
Total.....	\$192,838,149

*Export to Mexico.*

From the United States, 1859-'80 inclusive.....	\$136,709,506
From the United Kingdom, 1859-'80 inclusive....	115,644,267
From France, 1859-'80 inclusive.....	118,002,542
Total.....	\$370,356,305

The principal Mexican products imported into the United States, besides silver, during the fiscal year 1882, were:

Cochineal, indigo, and sarsaparilla.....	\$203,803
Coffee, 17,020,669 pounds.....	1,817,584
Dye-woods, 126,890 cwt.....	128,734
Horse-hair, 199,295 pounds.....	88,810
Hides and skins.....	1,525,107
India-rubber, 825,206 pounds.....	164,847
Mahogany and cedar.....	499,776
Sisal hemp, 19,233 tons.....	2,061,939
Sugar (raw), 2,931,649 pounds.....	102,147
Lead, 1,182,064 pounds.....	44,865
Other goods.....	1,874,787
Total.....	\$3,461,899

The chief articles of domestic merchandise exported from the United States to Mexico in the same year were: Agricultural implements, living animals, malt liquors, flour, candles, coal, cordage, cotton goods (these to the amount of \$2,566,790), drugs, glass-ware, iron and steel manufactures (these to the amount of \$3,861,514), leather goods, petroleum, ordnance, paints, paper, quicksilver (824,759 pounds), provisions, soap, leaf-tobacco (1,094,018 pounds), wooden-ware (\$1,426,411 worth), etc., amounting together to \$13,324,505.

The commercial treaty negotiated between the United States and Mexico by Messrs. Romero, Grant, Cañedo, and Trescott, and signed

January 20, 1883, still lacks ratification by the Senate of the United States, debate on which has been postponed to the next session of Congress. Under its provisions the ensuing Mexican articles of merchandise would enter the United States duty free: Palm-oil, living animals, indigo, quicksilver, sugar not over No. 16 Dutch standard, coffee, lobsters, beef, barley, leather-belt, raw-hides and skins, esparto-grass, natural flowers, green fruit, Sisal hemp, eggs, India-rubber, Tampico istle (a fiber kindred to Sisal hemp, and used as a substitute for bristles), jalap, all wood in the rough, honey, orchilla, and all dye-woods and tanning materials, straw, leaf-tobacco, vegetables, and sarsaparilla.

By way of reciprocity, the ensuing American manufactures and other products would enter Mexico duty free: Accordions and harmonicas, metallic wire for telegraphs, wire for carding (No. 26 and upward), barbed-fence wire, plows, spades, hoes and pickaxes, masts and anchors, asbestos for roof-covering, oats, quicksilver, sulphur, crow-bars, stoves, pumps and fire-engines, lime, wooden and iron houses complete, agricultural tools and implements, all sorts of tubing, coal, wire and vegetable cards for machinery, carts, wheelbarrows, coaches and railroad-cars, crucibles, cutlasses for cane-cutting, diligences, dynamite, staves, green fruit, guano, ice, iron and steel rails, hyposulphite of soda, scientific instruments, fire and other bricks, fire-wood, printed books not completely bound, locomotives, water-cocks, marble in the rough, marble slabs only polished on one side and not over forty centimetres square, steam-engines, sewing-machines, all industrial, agricultural, mining, and scientific as well as artistic ma-



chinery and apparatus, whole or in part, together with the rubber-belt belonging to each machine, fuse for mine-blasting, the precious metals ground or in bars, machine patterns and molds, United States gold and silver coin, naphtha, tarred pasteboard for roofing purposes, fodder, fresh fish, Venetian blinds, whether painted or not, lithographic stones, all plants and seeds new in Mexico, all metallic pens except gold and silver ones, crude and refined petroleum, slates for roofing and flooring, blasting-powder, clocks, oars for boats, sausage, all bags from Mexican hemp, earthenware and other shingles, printing-ink, printing-type, etc., rags, green vegetables, iron beams, iron supports for roofing, and anvils.

**MICHIGAN.** The State officers elected in November, 1882, and whose terms of office commenced January 1, 1883, to continue for two years, are:

Governor, Josiah W. Begole; Lieutenant-Governor, Moreau S. Crosby; Secretary of State, Harry A. Conant; State Treasurer, Edward H. Butler; Auditor-General, William C. Stevens; Commissioner of State Land-Office, Minor S. Newell; Attorney-General, Jacob J. Van Riper; Superintendent of Public Instruction, Varnum B. Cochran.\*

Officers appointed by Governor Begole, to hold two years from the first of January, 1883:

Commissioner of Railroads, William P. Innes; Commissioner of Insurance, Eugene Peingle; Commissioner of Immigration (with his office at Detroit), Henry N. Walker; Commissioner of Mineral Statistics (with his office at Marquette), A. P. Swineford; Warden of the State-Prison, Elihu B. Pond; Warden of the State House of Correction, David R. Waters.

The Supreme Court is constituted as follows:

Term expires

Benjamin F. Graves, Chief-Justice.....	Dec. 31, 1883.
Thomas M. Cooley.....	Dec. 31, 1885.
James V. Campbell.....	Dec. 31, 1887.
Isaac Marston.....	Dec. 31, 1889.

Charles C. Hopkins, Clerk;  
Henry A. Chaney, Reporter.

The court holds four terms a year, at Lansing, opening on the Tuesday following the first Monday in January, April, June, and October.

**LEGISLATION.**—Pursuant to proclamation by the Governor, the Legislature met in extra session February 23, 1882. The call specified as subjects of legislation: "The condition of the people in the Huron Peninsula of the State who were sufferers by the forest-fires of the autumn of 1881"; the consideration of the tax system, and the bills reported by the commission appointed during the regular session of 1881; and the division of the State into congressional districts, on the basis of the tenth census, and the apportioning act of Congress.

\* Mr. Cochran resigned in February, and Professor H. R. Gass, of Jonesville, was appointed by the Governor to fill the vacancy.

† Judge Marston has tendered his resignation since the 1st day of January, 1883, and his successor will be elected on the first Monday in April.

During the session other subjects were submitted by special message. The session continued until March 14th (the constitutional limitation), on which day it adjourned *sine die*, having enacted twenty-seven general and twenty-one local laws. Appropriations were made for the following purposes: For the erection of shops, etc., at the State House of Correction, Ionia, \$10,000; for the completion of buildings and other improvements at the State School for the Blind, at Lansing, \$11,300; for the relief of the sufferers by the forest-fires of 1881, \$250,000, and the further sum of \$15,000 for rebuilding the school-houses destroyed by the fires; for new buildings at the State Reform School, Lansing, including heating apparatus, furniture, etc., \$75,000; and for buildings at the State-Prison, Jackson, \$17,000. Of these appropriations the last item was to be paid from the general fund; \$140,000 of fire-relief appropriation to be incorporated in the tax levy for 1883; and all other sums to be levied and collected on the tax-rolls for 1882.

**TAXES, ASSESSMENTS, ETC.**—The most important act of the session was entitled "An act to provide for the assessment of property and the levy and collection of taxes thereon." The machinery of the old tax laws was preserved; property subject to taxation was divided into three classes: real, personal credits, and personal chattels. Exemptions heretofore existing were substantially continued. Indebtedness continues to offset credits, with the provision that the tax-payer desiring such offset shall make an itemized and detailed statement giving the name and residence of each creditor and the amount due each. A board of review is provided, consisting of members appointed by the township board, or city council, as the case may be, and the assessing officer of the township or city, and empowered to hear each tax-payer, and increase or lower the valuation as made by the assessing officer (supervisor of town, ward, or district). The most important change from the old law is in the method of selling the lands upon which the taxes are not collected by the minor officers. Under the old law the Auditor-General proceeded to advertise such lands in some paper published in the county in which they were located, and they were sold at public auction, subject to redemption during one year from the date of said sale. Under the new law: "As soon as practicable after the first day of July in each year, the Auditor-General shall prepare and file in the office of the County Clerk in each county in which lands are to be sold under the provisions of this act, a petition addressed to the Circuit Court for said county in chancery, stating therein, by apt reference to lists or schedules annexed thereto, a description of all lands in such county upon which taxes have remained unpaid for more than one year from the first day of July after their return to the Auditor-General, and the total amount of such taxes, with interest computed thereon to the time



fixed for the sale thereof, extended separately against each parcel of land, and he shall include with, and add to, such total amount against each parcel, sixty cents for the cost of advertising and other expenses of sale. Such petition shall pray a decree in favor of the State of Michigan against said land for the payment of the several amounts so specified therein, and in default thereof that such lands be sold." Notice is to be given of the filing of said petition, and that the hearing on the same will be at the next term of said court, and also that the sale of lands under decree obtained will take place on the following first Monday in May. Section 57, prescribing the method of proceeding in the hearing on said petition, is quoted in full:

SECTION 57. Any person desiring to contest the validity of any tax, shall file in writing his objections thereto with the clerk of the county, on or before the day fixed in said notice for the hearing of such petition, and shall not be allowed to make any objection not therein specified. If, within the first five days after the day fixed in such notice for the hearing of such petition, it shall be made to appear to the court that any person has been prevented from filing objections to any tax, without fault on his part, such further time may be granted for that purpose as may seem proper, not exceeding five days. The court shall give precedence to the hearing of such petition over all other business; shall examine, consider, and determine the matters therein stated, and objections made in a summary manner without other pleadings, and make final decree thereon as the right of the case may be. The taxes specified in the petition shall be presumed legal, and a decree be made therefor, unless the contrary is proved. Evidence shall be taken in open court. All oral testimony shall, at the request of any person interested, be written down and filed. The court may make such orders from time to time as may be necessary to facilitate the proceedings, and shall decide all questions as to the admissibility of evidence; and the decision, so made, shall be final, and not subject to review or appeal. If the lands of two or more persons have been assessed together, the court may, if practicable, separate the same, and apportion to each parcel its just proportion of the taxes, interest, and charges. If any tax shall be found illegal, it shall be rejected. If a part of any tax shall be found illegal, such part shall be set aside, and the remaining tax shall be decreed valid. The total amount of taxes, interest, and charges, as fixed by the court, shall be entered by the register of the court opposite each parcel of land in the column of said record, under the heading, "Amount decreed against lands." If the court shall make any order setting aside the taxes on any parcel of land, or any part thereof, or any special order relating to any particular parcel of land or tax thereon, a brief entry of such order shall be made upon said record, opposite such land or tax, which shall be signed by the judge of the court, either by his full name or initials, and such entry shall have the same effect as if made and entered as a part of the final decree. At least ten days prior to the time fixed for the sale of such lands, the court shall make a final decree in favor of the State of Michigan for such taxes, interest, and charges, as shall be valid, and determine the total amount thereof chargeable against each parcel of land; and shall order and decree that such several parcels of land, or so much of each as may be necessary to satisfy the amount fixed by such decree, shall severally be sold as the law directs. Such decree shall be considered as a several decree in favor of the State of Michigan, against each parcel of land, for each tax included therein. The court may decree such costs against a person contesting any tax as may be equitable, if the tax, or any part thereof which remains unpaid, is adjudged valid.

An appeal from the decree on any disputed tax must be made within ten days, and must be preceded by a payment of the decreed amount to the county treasurer, to be refunded if the Supreme Court shall decide against the validity of the tax. The county treasurer, or Auditor-General, may also appeal from a decree holding any tax invalid. After sales shall have been made by the county treasurer, and within twenty days, that officer shall make and file with the clerk of the court a report of such sale, therein referring to the original petition for the particulars thereof; and all sales shall stand confirmed, unless objections thereto are filed within eight days after the time limited for filing such report, without the entry of any order or further notice.

The practice with reference to setting aside such sale shall be the same, so far as applicable, as in a sale in equity on the foreclosure of mortgages: *Provided*, No sale shall be set aside for inadequacy of price, except upon payment of amount bid upon such sale, with interests and costs: *And provided further*, That no sale shall be set aside after confirmation, except in cases where the taxes were paid, or the property was exempt from taxation. In such cases the owner of such lands may move the court, at any time within one year after he shall have notice of such sale, to set the same aside; and the court may so order upon such terms as may be just. *Provided also*, That no sale shall be set aside after the purchaser, his heirs or assigns, has been in actual possession of the lands for five years. If a sale is set aside, the county treasurer shall refund to the purchaser the amount of his bid, with interest at seven per cent.

On confirmation of sales, and report by the county treasurer to the Auditor-General, that officer shall execute deeds to the purchasers:

Such deeds shall convey an absolute title to the land sold, and be conclusive evidence of title in fee in the grantee, subject, however, to all taxes assessed and levied on such lands subsequent to the taxes for which the same was bid off, and the deed shall so state. The court may, on application, put the purchaser in possession of the premises by writs of assistance.

Provision is also made for the sale of lands bid in by the State for want of private purchasers.

It is provided that assessments and sales shall not be held invalid for mere irregularities or informalities, and that all required records, statements, and certificates shall be *prima facie* evidence of the facts therein set forth. Also by

SECTION 85. In any suit or proceeding to enforce or set aside any tax, such tax shall be held illegal only for one of the following reasons:

1. That no law authorizes such tax.
2. That the person or persons appointed to decide whether a tax shall be raised under a given law, have acted without jurisdiction, or have not imposed the tax in question.
3. That the person or property assessed was exempt from the taxation in question, or was not assessed.
4. That the tax has been paid.
5. That the supervisor, or board of review, in assessing a person or property for taxation, or in the apportionment of the tax to the person or property in question, acted fraudulently.

If any such illegality, omission, or fraud, affects the



amount of the tax only, the tax shall be sustained so far as the same is just and legal.

The provisions of the law are designed to enforce and secure a more prompt and general payment of taxes than heretofore, or, in default, to make tax-titles of some value.

CONGRESSIONAL DISTRICTS.—The act dividing the State into eleven congressional districts constituted them by counties, and in population, as follow :

1. Wayne—166,426.
2. Hillsdale, Lenawee, Monroe, and Washtenaw—156,540.
3. Barry, Branch, Calhoun, Eaton, and Jackson—164,966.
4. Berrien, Cass, Kalamazoo, St. Joseph, and Van Buren—150,563.
5. Allegan, Ionia, Kent, and Ottawa—178,055.
6. Clinton, Genesee, Ingham, Livingston, and Oakland—164,218.
7. Huron, Lapeer, Macomb, St. Clair, and Sanilac—154,392.
8. Gratiot, Isabella, Midland, Montcalm, Saginaw, and Shiawassee—160,292.
9. Antrim, Charlevoix, Kalkaska, Lake, Manistee, Mason, Mecosta, Missaukee, Muskegon, Newaygo, Oceana, Osceola, and Wexford—125,308.
10. Alcona, Alpena, Bay, Cheboygan, Clare, Crawford, Emmet, Gladwin, Iosco, Montmorency, Ogemaw, Osceola, Otsego, Presque Isle, Roscommon, and Tuscola—111,152.
11. Baraga, Benzie, Chippewa, Delta, Grand Traverse, Houghton, Isle Royal, Keweenaw, Leelanaw, Mackinac, Manistowick, Marquette, Menominee, Ontonagon, and Schoolcraft—107,955.

FINANCES.—The financial condition of the State at the close of the fiscal year, September 30th, was as follows :

Cash balance September 30, 1881.....	\$1,793,362 07
Receipts for fiscal year.....	2,916,084 45
Total resources.....	\$4,709,446 52
Disbursements for the year.....	2,951,518 31
Balance in Treasury September 30, 1882.....	\$1,757,938 21
Add United States bonds in sinking fund..	300,000 00
Total cash and bonds.....	\$2,057,938 21

This sum stands to the credit of the following funds:

General fund to meet appropriations and current expenses.....	\$650,920 91
Normal School interest fund.....	925 88
University interest fund.....	8,548 60
Primary School interest fund.....	423,394 08
Sinking fund—cash.....	588,000 00
Sinking fund—United States bonds.....	300,000 00
St. Mary's Falls Ship-Canal fund.....	68,924 12
War fund.....	11,708 39
Sundry deposits.....	5,516 28

Total.....\$2,057,938 21

Balance due September 30th on specific appropriations, \$392,277.90.

The bonded debt of the State was decreased during the year in the sum of \$5,000, leaving the funded and fundable debt September 30, 1882, as follows:

Interest-bearing bonds:	
Six per cent due January 1, 1883.....	\$590,000 00
Seven per cent due May 1, 1890.....	298,000 00
Total interest-bearing debt.....	\$888,000 00
Non-interest-bearing bonds:	
Part paid \$5,000,000 loan adjusted at.....	12,149 97
Total bonded debt.....	\$900,149 97

After a transfer of \$305,895.27 to the primary-school interest fund, and \$16,875 to the general fund, the cash and United States bonds in hand September 30, 1882, and held for that purpose, were sufficient to cancel the bonded indebtedness.

The trust-fund indebtedness was increased during the year from \$3,752,476.84 to \$4,032,867.11. It is constituted as follows:

Primary-School fund.....	\$2,924,925 17
Five per cent Primary-School fund.....	337,996 54
University fund.....	485,601 80
Agricultural-College fund.....	224,865 15
Normal-School fund.....	60,075 45

Total avails of lands sold.....\$4,032,867 11

The State pays 5 per cent on the second item above, 6 per cent on the last item, and 7 per cent on the other bonds.

The receipts on account of specific taxes were:

From railroad companies.....	\$592,215 17
street-railway companies.....	310 50
palace and sleeping-car companies.....	1,068 94
fire-insurance companies.....	68,623 10
life-insurance companies.....	23,550 95
plate-glass insurance companies.....	71 95
mining companies.....	41,218 39
telegraph companies.....	4,130 94
telephone companies.....	1,078 48
express companies.....	1,852 17
plank and gravel road companies.....	1,298 84
river-improvement companies.....	1,351 77
boiler-inspection insurance companies.....	180 59
cornet bands.....	4 50

Total.....\$676,941 29

A decrease of \$73,148 from receipts from same sources in 1881.

The State taxes for the year, as apportioned to the several counties by the Auditor-General in October, were for the following purposes:

For the University.....	\$128,500 00
State Normal School.....	19,500 00
Agricultural College.....	16,194 50
State Public School.....	41,650 00
Michigan School for the Blind.....	29,800 00
Institution for the Deaf and Dumb.....	41,600 00
State Reform School for Boys.....	110,500 00
Michigan Reform School for Girls.....	11,000 00
State House of Correction.....	10,000 00
new Asylum for the Insane.....	150,000 00
Board of Fish Commissioners.....	7,500 00
State Board of Health.....	2,000 00
military purposes.....	57,271 73
relief of sufferers by fire of 1881.....	125,000 00
general purposes.....	272,575 00

Total.....\$1,021,091 23

The apportionment was made on an equalized valuation of \$810,000,000, and the tax was a slight fraction over \$1.26 on each \$1,000 of such valuation, or much less than that rate on the real valuation.

The full reports of the thirteen State banks, published as an appendix to the report of the State Treasurer, show their condition July 3, 1882, as follows:

RESOURCES.	
Loans and discounts.....	\$3,840,083 49
Bonds and mortgages.....	108,698 77
Cash and cash items.....	543,145 47
Real estate and fixtures.....	66,184 95
Due from banks and bankers.....	696,788 97
Expenses.....	21,622 71
Overdrafts.....	14,167 03
Total.....	\$4,795,666 89

LIABILITIES.	
Capital .....	\$797,400 00
Surplus .....	281,886 00
Due banks and bankers .....	74,437 21
Due depositors .....	3,541,812 92
Profit and loss .....	93,051 86
Rediscouts .....	57,011 73
Interest and exchange .....	66 62
Total .....	\$4,795,666 39

In 1881 fifteen banks reported, with total resources, \$4,869,714.72.

The reports of the fifteen savings-banks cover the quarter ending October 2, 1882:

RESOURCES.	
Loans and discounts .....	\$9,143,104 29
Bonds and mortgages .....	1,708,785 15
Cash and cash items .....	1,273,405 40
Real estate and fixtures .....	944,186 66
Due from banks and bankers .....	1,214,673 52
Expenses .....	84,229 89
Overdrafts .....	25,448 00
Total .....	\$13,748,785 91

LIABILITIES.	
Capital .....	\$1,262,100 00
Surplus .....	188,787 93
Due banks .....	111,459 84
Due depositors .....	11,905,000 79
Profit and loss .....	189,891 57
Interest and exchange .....	191,545 73
Total .....	\$13,748,785 91

The increase over the preceding year in loans and discounts is \$1,489,130.53, and in the item of due depositors, \$1,609,975.43.

**PUBLIC LANDS.**—The annual report of the Commissioner of Swamp Lands showed but 49,668 acres subject to appropriation at the close of the fiscal year. Subsequent to that date, and prior to December 31st, the Board of Control had appropriated 13,980 acres, and it was estimated that existing contracts would exhaust the remaining 35,688 acres, or leave none of any value.

The Commissioner of Immigration, in his first, concise, and valuable report, classifies the State, United States, and railroad lands sold during the year, and unsold at the close of the year, as follows:

LANDS.	Acres sold.	Acres unsold.
State lands .....	177,450	683,735
United States lands .....	474,379	1,282,367
Railroad lands .....	226,796	2,857,397

Of the United States lands unsold or subject to location 1,004,140 acres are in the Upper Peninsula, or Marquette district, and 1,875,961 acres of the railroad lands are also in the Upper Peninsula.

**RAILROADS.**—The tenth annual report of the Commissioner of Railroads bears date November 30, 1882, but is principally compiled from the returns made for the year ending December 31, 1881. At that date the number of railroad corporations doing business in the State was 54, and the number of separate managements 32, with a total mileage in the State of 4,252. This mileage was increased in 1882 (though the detailed statistics of the increase are not included in the report) to 4,545, exclusive of 47 miles of ore and forest roads. The

commissioner says: "Ten years since the railroad system of the State was confined almost entirely to the southern third of the Lower Peninsula, the business under the control of only thirty corporations, and the whole value of their property represented by a stock and debt account of \$259,271,228.40. Now of all the counties in the Lower Peninsula there are but eight—Alpena, Alcona, Benzie, Gladwin, Leelanaw, Montmorency, Oscoda, and Presque Isle—without railroad facilities. In the Upper Peninsula the 216.80 miles of railroad in 1872 have increased to 397.33 in 1881, and all its counties but three are now connected by rail with the outside commercial world, and the total amount of stock and debt now reported to this office is \$507,710,593.69. The capital stock paid in, as shown by the reports for 1881, was \$239,505,422.14, being an increase for the year of \$78,925,102.09, or 49.77 per cent. The large increase both in stock and mileage is principally credited to the Chicago and Northwestern; Detroit, Mackinac, and Marquette; and Wabash, St. Louis, and Pacific Companies. The stock per mile is reported at \$20,890, being a decrease of \$6,486.48, or 20.02 per cent. The funded debt was increased during the year from \$142,212,896.73 to \$245,907,462.77, and the floating debt from \$11,159,142.17 to \$22,573,142.02; a total debt increase for the year of \$115,128,295.89. Notwithstanding this aggregate increase, the decrease per mile was \$2,739.54. The total cost of the properties is put at \$487,560,525.79, being \$42,520 per mile of road, while the total stock and debt aggregates \$507,710,593.69, or \$44,275.71 per mile. The amount of stock and debt chargeable to mileage operated in Michigan is \$188,257,300, the cost of which was but \$173,682,876.96. Excess of stock and debt over cost of road-bed and equipment, \$14,474,423. The total receipts for the year were \$76,322,484.14, and the total operating expenses, including taxes, \$50,454,951.15, an excess of receipts of \$25,867,332.99. Against this excess is chargeable: interest on funded debt, \$13,825,472.46; on floating debt, \$310,675.67; for rentals, \$3,001,321.75; leaving to the credit of net income account, \$8,730,063.11. Nine roads failed to earn enough to pay their ordinary operating expenses, their deficiencies being \$109,965.50. But ten companies paid dividends, the amount being \$9,055,250.60. The deficiency in the year's business, after paying expenses, interest, rentals, and dividends, was \$325,187.49. The total number of passengers transported during the year was 18,914,933. Excess over previous year, 5,317,733. The entire passenger mileage, or passengers carried one mile, was 824,103,330, an increased mileage over 1880 of 262,120,506. The average distance traveled by each passenger was 43.57 miles, for which he paid 98 cents, or an average rate per mile of 2.238 cents. The tonnage of freight of all kinds during the year was 37,779,555, an increase over 1880 of 10,949,005, or 40.80 per cent. The total freight



mileage, or tons carried one mile, was 5,753,029,773, an increase of 963,608,964, or 20.12 per cent. The Chicago and Northwestern and the Wabash system are credited with the larger share of both increased tonnage and mileage. The average ton haul was 152.27 miles; the average freight received for each ton moved, \$1.72, and the rate per ton per mile 1.13 cent, an increase of 2.7 mills over 1880. The casualty list was unusually large:

PERSONS.	Killed.	Injured.	Total.
Passengers .....	12	40	52
Employés.....	61	270	331
Others .....	67	61	128

Eighty-three are classed as purely accidental, and 428 as resulting from direct carelessness or want of proper caution. Of the number killed classed as "others," 55 were tramps, trespassers, or ride-stealers, 28 of whom were on the track intoxicated, 11 were killed at highway-crossings, and one was a suicide. Of the same class injured, 51 were tramps or trespassers. The number of passengers killed was one for every 492,448 carried, and the number injured one for every 145,234. Of employés, one in every 286 was killed, and one in each 71 injured. The most prolific cause of injury to employés continues to be the coupling of cars, but nine employés were injured from being caught in a frog.

**LUMBER BUSINESS.**—The following figures, relative to the lumber-cut of the seventy Saginaw River mills, and of the mills tributary to the Saginaw Valley, are abstracted from the full tables found in the "Annual Review," compiled and published by order of the Saginaw Board of Trade:

Pine-lumber cut in 1881.....	967,320,317 feet.
Pine-lumber cut in 1882.....	1,011,274,905 "
At inland mills in Saginaw and Bay Counties.....	17,873,000 "

At other inland and railroad mills.....	150,000,000 feet.
Total pine-cut of year.....	1,490,582,022 "
Hard-wood lumber cut in 1882.....	24,649,900 "
Pine-lumber on dock—sold.....	105,073,000 "
Pine-lumber on dock—unsold.....	204,009,999 "
Logs in boom.....	68,575,000 "
Oak and pine square timber.....	7,853,000 "
Hard-wood lumber at inland mills.....	4,759,900 "
Salt-barrel staves cut.....	49,372,116 pieces.
Salt-barrel headings cut.....	2,851,815 sets.
Shingles cut in Saginaw and Bay Counties.....	295,046,500

With 275,000 feet of shingle-logs in boom. Oak pipe staves cut for foreign markets, 758,082, against 1,537,073 in 1881.

The same publication gives in detail the product of the other lumber districts of the State, and closes with the following summary tables of the cut of pine-lumber for 1882:

## EASTERN MICHIGAN.

Saginaw Valley mills.....	1,028,648,505
Flint and Pere Marquette mills.....	112,638,562
Saginaw Valley and St. Louis Railroad.....	8,500,000
Detroit, Saginaw, and Bay City Division.....	8,000,000
Mackinac Division.....	56,550,000
Tawas.....	49,438,443
Oscoda and Au Sable.....	181,908,525
Alcona mills.....	20,000,000
Alpena.....	179,000,000
Cheboygan.....	82,000,000
Miscellaneous and scattering mills.....	50,000,000

Total.....1,764,688,935

## WESTERN MICHIGAN.

Lake Michigan towns.....	1,476,996,679
Chicago and West Michigan Railroad.....	206,911,000
Grand Rapids and Indiana Railroad.....	329,910,668
Detroit, Lansing, and Northern Railroad.....	102,748,000
Miscellaneous and scattering mills.....	97,851,000

Total.....2,214,117,347

Grand total for Michigan.....	8,973,801,282
Grand total for Northwest, 1882.....	7,519,896,191
Grand total for Northwest, 1881.....	6,768,856,740

**SALT MANUFACTURE.**—The same "Review" gives the following table of the salt inspected during the year:

COUNTIES.	Fine bulk.	Fine barrels.	Packers.	Solar.	Second quality.	Total.
Saginaw County .....	290,573	951,064	1,900	26,535	17,196	1,287,273
Bay County .....	194,270	935,934	6,740	4,800	16,485	1,158,279
Huron County.....	.....	241,955	8,158	.....	9,599	255,012
Iosco County.....	.....	205,700	1,765	.....	4,152	211,667
Midland County.....	.....	69,554	.....	.....	10,685	80,239
Manistee County.....	7,519	80,149	8,645	.....	235	41,562
Gratiot County.....	800	995	.....	.....	1,550	8,285
Total.....	493,167	2,435,385	17,208	81,335	60,222	3,037,317

The total manufacture for the year was 3,204,921 barrels, embracing the grades of fine bulk, fine barrels, packers, solar, and second quality. The average price of salt for the year was 70 cents a barrel.

**MINERAL STATISTICS.**—The Commissioner of Mineral Statistics, Hon. A. P. Swineford, of Marquette, furnishes full tables of the products of the mines and furnaces of the Lake Superior region, from which the following tables are condensed. The first table gives the iron product for the last five years, with the total product for twenty-seven years, making the total 20,584,931 tons, valued at \$164,830,526:

YEAR.	Ore.	Pig-iron.	Ore and pig.	Value.
	Tons.	Tons.	Tons.	
1873.....	1,125,098	17,404	1,142,497	\$6,884,432
1879.....	1,414,182	39,583	1,453,765	11,418,114
1880.....	1,987,596	48,528	2,036,121	19,457,427
1881.....	2,321,815	52,953	2,374,265	20,498,613
1882.....	2,942,438	72,992	3,015,450	26,238,251
27 years.....	20,584,931	916,213	21,501,144	\$164,830,526

The quartz production of the year was 12,623 tons, valued at \$63,115. Total value of ore, pig-iron, and quartz, \$26,301,366. Excess over 1881, \$5,727,655.

The output of the charcoal furnaces was:

FURNACES.	Gross tons.	Value.
Carp River Iron Company's furnaces.	11,886	\$325,490
Deer Lake	8,888	242,908
Jackson	8,657	238,066
Florence	5,400	148,500
Menominee	10,400	286,000
Martel	11,217	305,407
Pioneer	16,619	457,923
Total	72,962	\$2,006,454

The mines which produced each an ore-product valued at over \$1,000,000, were: Lake Superior, \$2,834,885; Republic, \$2,351,109; Chapin, \$2,103,810; Cleveland, \$1,958,140; Champion, \$1,590,090; and Norway, \$1,076,055. The Florence put out a valuation of \$960,930; the Jackson, \$919,885; the Vulcan, \$799,357; the Commonwealth, \$752,503; the Perkins, \$626,008; and the New York, \$539,657. No other mine produced half a million. The product of the Indiana dropped from \$1,024,500, in 1881, to \$36,380.

The product of the copper-mines is stated as follows, in pounds:

Houghton Company's mines	50,770,719
Keweenaw Company's mines	5,462,648
Ontonagon Company's mines	1,025,770
Total	57,259,137

Compared with 1881, the output of the mines producing over one million pounds each was as follows:

MINES.	1881.	1882.
Calumet and Hecla	38,924,482	31,914,726
Quincy	6,815,485	5,553,784
Oscoda	4,506,880	3,841,754
Franklin	3,228,190	3,179,786
Atlantic	3,031,995	3,014,976
Allouez	1,939,845	1,839,408
Central	Not given	1,448,008
Pewabic	1,247,550	1,481,224

The next largest producing mines were: Massachusetts, 837,928 pounds; Conglomerate, 793,100; Grand Portage, \$710,192; Copper Falls, 695,808; Hancock, 672,009; and Phoenix, 531,472.

The average price of copper during the year was 18.41 cents per pound, which would give an approximate value of \$10,541,407.12.

EDUCATION.—The Superintendent of Public Instruction furnishes the following statistics of the primary schools in advance of his annual report:

Whole number of school districts	6,630
Increase over preceding year	104
Whole number of school-houses	6,728
Increase over preceding year	153
Number of children between five and twenty years of age	588,802
Increase over preceding year	20,508
Number of children attending public schools	885,504
Increase over preceding year	18,761
Number of private and select schools	271
Number of pupils attending private and select schools	20,577
Number of teachers employed in public schools—men	3,887
Number of teachers employed in public schools—women	10,580
Total of both sexes	14,467
Decrease since 1881	5

Total wages paid teachers	\$2,193,002 68
Increase over 1881	168,988 84
Estimated value of school property	9,848,498 00
Amount on hand from preceding year	876,882 25
Amount received from one-mile tax	514,504 56
Amount received from primary-school interest fund	626,673 56
Amount received from tuition of non-resident pupils	40,518 18
Amount received from district taxes	2,269,504 47
Amount received from all other sources	406,948 69

Total receipts for the year.....\$4,785,026 74

Total expenditures for all purposes	\$3,789,290 88
Amount carried forward to next year	945,735 81

Total.....\$4,785,026 74

The annual report of the Acting Principal of the State Normal School gives the following summary of students in attendance during the school year 1881-'82:

In Normal department	880
Practice school—Grammar department	77
Primary department	112
Counted twice by transfer	519
Total	8

Total.....511

Number graduated during the year: Common-school course, 48; English courses, 18; language courses, 21. Total, 82. The disbursements for the year were: On account of salaries and current expenses, \$26,650.72; for new building and special purposes, \$24,839.49. Total, \$51,490.21. The receipts, exclusive of balances, Sept. 30, 1881, were \$48,266.57; \$3,415 came from tuition, laboratory, and diploma fees, and \$44,851.57 from the State Treasury.

The report of the President of the State Agricultural College makes the following showing for 1881-'82: Number of students, 221 (a decrease of seven from the preceding year). Classification: Resident graduates, 2; seniors, 29; juniors, 31; sophomores, 56; freshmen, 82; specials, 21. The number of ladies in the several classes increased from seven to nine (one senior, two sophomores, two freshmen, and four in select studies). At the annual commencement, August 15th, the degree of Bachelor of Science was conferred upon 28 graduates, including one lady, the first daughter of the college. During the year 10,225.99 acres of college lands were sold for \$51,129.25; also 1,637.01 acres of forfeited college lands for \$8,335.05; leaving unsold 124,886.74 acres that have never been sold, and 10,583.13 acres forfeited or once-sold lands—in all, 135,469.87. At the same price the sales were made during 1882—\$5 per acre—these lands have a cash value of \$677,345, and may be expected to increase the present endowment fund of \$224,868.15 in that amount. The expenses of the last two years (reported together) were \$167,069.61, and cash balance, September 30, 1882, \$7,211.32.

The annual report of President Angell, of Michigan University, evidences a prosperous year. The number of students enrolled was the same as last year, classified by departments as follows: Department of Literature, Science, and the Arts, 513; Department of Medicine



and Surgery, 380; Department of Law, 395; School of Pharmacy, 100; Homœopathic Medical College, 71; College of Dental Surgery, 75. Of these 184 were women, 110 of whom were in the Literary Department, 44 in the Department of Medicine and Surgery, 2 in Department of Law, 5 in the School of Pharmacy, 19 in the Homœopathic Medical College, and 4 in the Dental College. Concerning these the president says: "A good proportion of the women who have graduated here are holding conspicuous positions either as medical practitioners or as teachers in high-schools, academies, and colleges. No less than six members of the present faculty of Wellesley College, including the president, are graduates of this university. Several women who graduated from the medical department are in heathen lands discharging the varied and responsible duties of medical missionaries." The president further says: "About three fifths of the students in the literary department were from Michigan. More than half of the students in the other departments were from elsewhere. Perhaps no other institution in the country has so wide-spread a constituency. Last year we had students from every one of the Eastern, the Middle, and the Western States, and from every Southern State but four; from four Territories and the District of Columbia; and from Ontario, New Brunswick, Manitoba, the Hawaiian Islands, Nicaragua, Cuba, Bermuda, England, Ireland, Roumania, Egypt, and Burmah." The degrees conferred on examination during the year were: Bachelor of Letters, 8; Bachelor of Science, 9; Bachelor of Philosophy, 19; Bachelor of Arts, 39; Master of Letters, 1; Master of Science, 3; Master of Philosophy, 1; Master of Arts, 4; Doctor of Philosophy, 2; Doctor of Medicine (department of medicine and surgery), 92; Bachelor of Laws, 170; Pharmaceutical Chemist, 40; Doctor of Medicine (homœopathic college), 15; Doctor of Dental Surgery, 32. Total, 435. The honorary degrees were: Master of Arts, 2; Doctor of Philosophy, 2. The degrees of Civil and Mining Engineer are now offered only as second degrees. The receipts of the year, exclusive of balance, September 30, 1881, were \$266,740.06; the disbursements, \$245,884.09; and the balance on hand, September 30, 1882, \$28,118.75. The receipts from students' fees were \$85,979.10, and the payments on account of salaries of officers, professors, and employes, were \$118,390.82.

**CHARITABLE INSTITUTIONS.**—The annual report of the Superintendent of the Michigan Asylum for the Insane, for the year ending September 30, 1882, shows:

Patients September 30, 1881.....	635	
Received during the year.....	290	885
Discharged recovered.....	29	
" improved.....	37	
" unimproved.....	30	
Died.....	49	145
Remaining September 30, 1882.....	740	

The heredity of the 200 patients admitted during the year is stated as follows: Paternal insane—immediate, 13; remote, 11. Maternal insane—immediate, 11; remote, 9. Paternal and maternal insane, 6; brother or sister insane, 25; unclassified, 7; dissolute parentage, 13; unascertained, 35; no insanity reported, 70. Of the same 200, 55 males and 48 females were married; 58 males and 23 females single, and 9 males and 7 females widowed; 98 were farmers, gardeners, or agricultural laborers; 36 common laborers and domestics; 10 workers in leather; 10 workers in stone; and only a small percentage belonged to the professional classes.

The report of the Medical Superintendent of the Eastern Michigan Asylum makes the following showing:

Under treatment September 30, 1881.....	471	
Admitted during year.....	187	558
Discharged recovered.....	44	
" improved.....	26	
" unimproved.....	10	
Died.....	86	
Temporarily absent.....	1	117
Remaining September 30, 1882.....	541	

Of this number 273 are males and 268 females. The superintendent, after classifying the patients under the head of "probable exciting causes," and the tendency to "ascribe insanity to moral causes," says that "insanity is very rarely to be ascribed to a single cause," and reaches the conclusion that "the causes of insanity are manifestly physical and affect the individual by depressing the general health. This interferes with the nutrition of the brain, and mental alienation results." The expenditures for 1882 were \$175,618 for all purposes, and the average weekly cost per capita was \$3.91½.

The Board of Commissioners of the Northern Asylum for the Insane report the purchase of a site near Traverse City, overlooking Grand Traverse Bay, consisting of 339 acres, with contracts for 57 acres adjoining the same; also that plans have been adopted, building material contracted for, and a contract let for the erection of the building.

The report of the Principal of the Michigan Institution for the Education of the Deaf and Dumb gives an enrollment for the session of 1881-'82 of 249. The graduating class numbered but four, chargeable to an increase of the school course from eight to ten years. The disbursements on account of current expenses were \$46,589.74, of which amount \$5,072.76 came from earnings and \$41,516.98 from the State. The trustees say: "The graduates of this institution will compare favorably in literary attainments with those of the high-schools of our State, while in ability to earn a living and become self-supporting we think they surpass any equal number of speaking pupils of eight years' training that may be selected"—which work is accomplished at an average weekly expense for each pupil of \$3.23.

The first biennial report of the Michigan School for the Blind says: "During the period of two years, ending June 22, 1882, there have been 73 pupils enrolled, of whom 55 were in attendance the first year and 63 the second. These pupils were divided into different grades, as follows: first grade, 12; second grade, 18; third grade, 43. Gratifying progress is reported both in the studies pursued in the school and in the industrial department. The disbursements for the fiscal year ending September 30, 1882, were: for current expenses, \$22,140.32; for buildings and special purposes, \$19,728.81. Total, \$41,869.13. Statistics collected by State authority in 1881 give the number of blind persons resident in the State in that year as 540—325 males and 215 females. Of this number 67 were under twenty years old and 48 between the ages of twenty and thirty years; 90 are reported as having been inmates of institutions for the blind, and 382 have never been inmates of any institution.

REFORMATORY AND PENAL.—From the biennial report of the State Public School Superintendent the following statistics for the fiscal year ending September 30, 1882, are collated:

Received during the year.....	150
Indentured during the year.....	175
Returned to counties.....	19
Returned from families.....	64
Died.....	2

Remaining in school September 30, 1882..... 811

Current expenses for year, \$37,200.26, and average cost per capita, \$119.61. Under the head of "Discipline," Superintendent Alden says:

The question is many times asked how the children are disciplined. In answer I have to say, generally, that the character of our government is paternal. The majority of the children are kept in order by the rules and general system of the institution, without resorting to any or much punishment. But all can not be so governed. Some are very disobedient and vicious, destructive of property, overbearing and oppressive toward their fellows, untruthful and dishonest, and resort must be had to such punishments as are best suited to their years, dispositions, and offenses. What will reach one child effectively makes no impression upon another. The circumstances of the particular case in hand can alone determine the punishment.

It has been claimed by some institutions that they do not use corporal punishment. A careful and somewhat extended investigation of this claim has convinced me that they must have *forgotten*. I am convinced that there is not a child's institution in the country where corporal punishment is not occasionally resorted to as the most effective punishment for some children. This institution has never made any such pretensions. As a last resort, when all other things have proved ineffective, a few strokes, from two to ten, as the case may be, are given on the hand with a light switch or leather strap. This is usually sufficient. At least, I am satisfied that if such a moderate punishment fails, greater severity would, in time, tend to harden instead of softening the culprit. Placing children in bed for a part or all of the day, depriving them of play, giving them bread and water for one meal or shutting them up by themselves in a cheerful room where they may have time to reflect and come to themselves, I find sometimes quite effective. In all cases more depends upon the spirit and manner of the person administering the punishment than upon

the punishment itself. I know that there are persons who disapprove of all these or any punishments, but I think that eight years' experience, with twelve hundred children, such as come to us, would considerably modify their views, and they would discover things not dreamed of in their philosophy. It will still ever be true, however, that the "minimum of punishment is the maximum of excellence."

Miss Emma A. Hall, the accomplished and zealous Superintendent of the Michigan Reform School for Girls, in her first report to the Board of Control, gives the number of girls received up to, and in the school, September 30, 1882, as follows:

During August and September, 1881.....	19
From September 30, 1881, to September 30, 1882.....	67
Returned to court.....	3
In school September 30, 1882.....	88

The girls were graded: In Cottage No. 1, or lowest grade, 19; in second grade, 25; in highest grade, 39. "Tickets of leave" had been granted four of the girls of the highest grade, and they were soon to be placed in good homes, where they will receive care, protection, and fair wages for their services, a portion of which will be placed in a savings-bank for them. One girl was but eight years old, eighteen were over sixteen years, and the average age was thirteen and three quarters years. They have made good progress in their studies, and of their industrial advance the superintendent says: "Seventeen can make yeast and bread well, thirty can do dining-room work well, thirty are good general kitchen-girls, five excel in laundry-work, twenty-three are good in general laundry-work, thirty-three in chamber-work, fifteen good sewers, thirty-two can sew straight seams and hem neatly, and thirty-six have begun to learn to sew." Of these same girls the Board of Control say: "They came from wretched abodes, their habits were vile, and their health poor—most of them ignorant, dirty, and untrained. Cleanliness, wholesome food, early hours, exercise, and discipline, have changed them into cleanly, healthy, and useful girls, so that it would be difficult to distinguish them from the pupils attending public schools. Their improvement is greater than the most hopeful of us dared to expect." Also:

Girls who come to us are usually those who have already entered upon a life of vice and sin—all are ignorant—the cases are exceptional where they have not been exposed to the depraving and debasing influences of poverty and vicious associations. The process of reformation is longer and more difficult than that of formation. To implant new and better tastes and purposes—to create a desire for a better life, better surroundings and companionships—can not be effected in a short time. The public must not expect our school to eradicate or overcome the evil tendencies to which these girls have been exposed, unless time is allowed for the work. The girls are treated by the management of the school, not as criminals, but as friendless, unfortunate children committed to their care. The Board of Control stands to them as parents, and as such pity and care for them. It is the aim of the school to make it resemble, as nearly as possible, a well-regulated Christian family, with its household worship, maternal influence, pious counsels, and steady and gentle but authoritative training. All the girls are taught domestic work, to wash



and iron, to cook, to sew, to sweep, and perform all household duties. Some of the girls are too young to do hard work, but they assist in lighter labors.

The girls are taught in the school-room two and a half hours daily in the ordinary branches of the district schools. Four cottages are completed, and three occupied; capacity, thirty-two each.

The statistical tables which accompany the report of the Warden of the State House of Correction at Ionia, for the year ending September 30, 1882, show:

Number of prisoners September 30, 1881 .....	386
" received on sentence .....	1,267
" returned from witness .....	1
Total .....	1,654
Number discharged by expiration of sentence .....	1,034
" " order of court .....	70
" " pardon .....	11
" " death .....	4
" escaped and not recovered .....	6
	— 1,125
Number remaining September 30, 1882 .....	529

The greatest number of prisoners at close of any day, 624; least number, 386. Average daily number, 510. The disbursements on account of current expenses were \$77,381.67; cash earnings for same period, \$40,348.47; excess of disbursements over earnings, \$37,033.20. Deduct from last amount value of labor entering into permanent improvements, material paid for from current expense fund, and value of appraised farm products (\$27,280.17), and the net expenditures exceed the earnings, \$9,753.03.

The annual report of Warden Humphrey, of the State-Prison at Jackson, shows:

Number of convicts September 30, 1881 .....	699
Received during the year .....	202
	— 901
Discharged by expiration of sentence .....	238
" order of Supreme Court .....	2
Pardoned by Governor .....	4
Died .....	8
Escaped .....	8
Transferred to Detroit House of Correction .....	2
Discharged for new trial .....	8
	— 265
In prison September 30, 1882 .....	636

Average length of sentence, three years, nine months, twenty-five days. The general classification of offenses is: against life and person, 49; against chastity and decency, 7; against property, 139; for forgery and counterfeiting, 7. The net earnings of the year are given as \$90,360.97, and the net expenditures, \$98,040.99. During the year contractors paid \$11,155.75 to convicts on account of overwork, or more than twelve per cent of the net earnings.

**POLITICS.**—The biennial general election was held November 7th. On the preceding 23d day of August a Democratic State Convention was held at Jackson; and on the same day the State Convention of the National Greenback-Labor party was held at Grand Rapids. Before the meeting of these two conventions negotiations had been entered upon looking to a union of the two parties upon a single ticket. These negotiations were continued, by tele-

graph, during the sessions of the conventions, and resulted in an agreement between the contracting parties for a division of the State ticket, each party to nominate its own assigned portion and adopt its own platform. The nominations by each party were ratified by the other, and a union ticket thus presented for the suffrages of the electors of the State. A "bolt" from the Grand Rapids Convention took place, and the nomination of a straight Greenback ticket followed.

The Democratic Convention, by a unanimous vote, placed its chosen candidates upon the following platform, a platform heartily indorsed by the entire Democracy of the State:

The Democracy of Michigan, in convention assembled, recognizing the people as the source of political power, and the Constitution as the fundamental law of the land, do solemnly declare:

1. That home rule is the essence of free government; that the line bounding State and national authority is clearly defined, and needs only to be strictly followed to insure the broadest liberty to the people.

2. Earnestly believing that a real civil-service reform is needed to purify every department of the Federal Government, we therefore demand, as an initial but important step in this direction, an amendment to the Federal Constitution which will give to the people of the several cities, villages, and such other postal districts as may be authorized by law, the right to elect postmasters.

We also demand that Federal subordinate officers shall not be appointed or removed because of political belief, nor appointed until their ability and merit have been proved by open public examination and competition, and that political assessments on, or forced contributions from, public officers should be made felony by law.

3. We are unalterably opposed to the unjust, unequal and iniquitous system of taxation called a protective tariff, which oppresses the farmer and laborer, destroys our merchant marine, breeds and enriches monopolies and impoverishes the poor. The traditional policy and principles of the Democratic party are on the side of complete commercial freedom; and we demand immediate and aggressive revenue reform in the direction of free trade, subject to a tariff only sufficient to raise the necessary revenue for the expenditures of government economically administered.

4. That the right of Congress to make appropriations for the improvement of rivers and harbors should be restricted to such as are of national importance; that the people of Michigan can not be bribed with a share of the theft to sanction the waste of \$30,000,000 in two years; and we denounce without distinction of party all who voted in Congress for the iniquitous River and Harbor Bill.

5. That the letting of the printing of the annual tax-sales to party favorites, without competitive bidding, and the keeping in the State Treasury of from one to two million dollars of State funds for the benefit of partisan office-holders while the people are heavily taxed, are demoralizing to the public service, and demand immediate reform.

We cordially invite the voters of Michigan, without regard to previous party affiliations, to join us in an earnest effort to correct these abuses, by withdrawing the administration of State affairs from those who have been already too long in power, and confiding it to those who come freshly from the people, untrammelled by the tyranny of political rings and of party machinery.

The ticket nominated did not meet so cordial an indorsement, but after some protesta-



tions of dissent was generally supported by the party at the polls.

The convention at Grand Rapids put forth the following declaration of principles:

The National Greenback-Labor party of Michigan reaffirms the leading principles of the party, as set forth in the last national platform, which have been forcibly epitomized as follows: First, to destroy sectional strife; second, to pay promptly the public debt; third, to reduce taxes and expenditures; fourth, to establish unlimited coinage of gold and silver; fifth, to substitute government legal-tender paper for bank-issues; sixth, to overthrow corruption at the polls and in representative bodies; seventh, to secure a free ballot and a fair count; eighth, to control by law, and bring into subjection to the interests of the people, all monopolies which have corrupted the public service, and by combination and extortion have established absolute dominion over money or invention, and over land and labor.

1. The right to petition to amend the Constitution is a sovereign power of the people, and we therefore favor the submission to the people of the question of constitutional prohibition of the liquor-traffic for ratification or rejection.

2. We shall support no candidate for any official position who will not pledge himself that if elected he will not accept from any corporation a free pass on any railroad or public conveyance, or its equivalent, while holding official position.

4. We denounce the Republican party for having rechartered the national banks; for having attempted to relieve the banks of taxation rather than the producing classes; and for extravagant appropriations of nearly \$80,000,000 in excess of former years.

5. That the assessment of office-holders for a corrupt campaign fund is the crowning shame of a party owned by grasping monopolists and bossed by unscrupulous politicians, who seek power for the spoils afforded through excessive taxation of the people.

6. That we favor the repeal of the specific tax on railroads and other corporate property, and demand that they be subjected to a tax in the municipality where located, upon the same basis as other property is assessed.

7. That we invite all good citizens to join us in carrying these principles to a successful issue at the ballot-box.

The Republican State Convention met at Kalamazoo, on August 30th, nominated a full ticket with great unanimity, and adopted the following exhaustive set of resolutions:

1. The Republican party of the State of Michigan, assembled in convention for the first time since the tragic death of James A. Garfield, our beloved leader and revered Chief Magistrate, grateful for the inspiring lessons of his life and example of his heroic death, record, first of all, our profound sorrow at his loss and our veneration for his memory; and next, our strengthened and abiding faith in the stability of republican institutions; and our fixed resolve that governments of the people, by the people, and for the people, shall not perish from the earth.

2. Chester A. Arthur, called to a place of power under most trying and delicate circumstances, has proved himself worthy of the high trust reposed in him. He has given to the country an administration conservative, patriotic, and progressive. The Republicans of Michigan extend to him their confidence for the future, based upon the record of the past.

3. The Republicans of Michigan once more declare their devotion to the time-honored and fundamental principles of the National Republican party—liberty for all men; equality before the law; perpetual union of the States; supremacy of the nation; and the inviolable right of every citizen on every foot of American soil to cast his ballot according to his sovereign will,

and to have such ballots, and only such, honestly counted and truly returned to constitute the "voice of the people," which is the voice of God.

4. From its organization until now the Republican party has denounced slavery and polygamy as "twin relics of barbarism." The first perished at the hands of the Republican party, shot to death on battle-fields and buried in amendments to the Constitution. The second disgrace of our civilization and our century must die. We demand that polygamy be destroyed. We cordially commend the efforts of our Senators and Representatives in Congress to that end.

5. Whatever may be our individual views as to the ultimate ideal system of international trade, we are all agreed that the public debt must be paid, the pensions of the nation's defenders and their widows and orphans sacredly guarded, and the current expenses of the Government duly provided for; that the revenues necessary for these purposes must in a large part be derived from duties upon imports, and we affirm that, in the adjustment of these duties in any revision of the tariff, care should be taken to relieve from taxation, so far as practicable, the necessities of the poor, especially such as do not come into competition with American production, and at the same time to afford incidental protection to American producers, to the end that wages may be maintained at the American standard, and America control the American markets.

6. We believe that the time has come when the public debt and rate of interest upon public securities have been so far reduced that our national legislators should consider as an immediate duty the reduction of the burdens of taxation, and, as auxiliary thereto, a revision of the tariff.

7. We believe in a rational civil service which does not create of the official class a separate caste, nor take away from the citizen the inspiration of participation in the administration of the government, yet which requires that offices shall be regarded as trusts to be administered with intelligence, fidelity, and economy, and not as spoils to be distributed as personal perquisites of political managers.

8. In the administration of the State and national Governments we demand efficiency, integrity, and economy; that unfaithful officers be removed and punished; that the public faith and credit be maintained, and the people be provided with a circulating medium, safe, uniform, and constitutional; that monopolies dangerous to the liberties of the people and purity of the laws be disfavored, and that the purity of the ballot be sacredly protected.

9. It is the fundamental right of the people to alter from time to time the organic law of the State as new circumstances or growing evils may require, laying its foundations on such principles and organizing its powers in such form as to them shall seem most likely to effect their safety and happiness. The evils of intemperance have become so great that in the name of patriotism the most efficient measures ought to be taken to reduce those evils to a minimum, and as members of no political party are wholly agreed as to whether this can be best done through prohibition or regulation of the traffic in taxing liquors, and as the people are and ought to be the final arbitrators of this question, and as more than 100,000 among the moral and intelligent people of the State have asked by petition that the question be put to the people by the submission to them of a prohibitory constitutional amendment, we declare that we believe that it would be wise and patriotic for the next Legislature to submit such an amendment to a direct vote of the people, and we demand that it be so submitted.

10. Republicans of Michigan demand a full legislative investigation of the transportation question, with a view to securing such legislative enactments as will prevent unjust discriminations in rates by railroad lines operating in the State.

A Prohibition State ticket was also put in the field, upon a platform demanding the sub-



mission to the electors of a constitutional amendment prohibiting the manufacture and sale of intoxicating liquors of whatever name.

The election resulted as follows:

FOR GOVERNOR.

David H. Jerome, Republican.....	149,697	
Josiah W. Begole, Union.....	154,268—	4,571
David P. Sagendorph, Prohibitionist.....	5,854	
Waldo May, Greenbacker.....	2,006	

FOR LIEUTENANT-GOVERNOR.

Moreau S. Crosby, Republican.....	157,615—	8,172
Eugene Pringle, Union.....	149,448	
William G. Brown, Prohibitionist.....	4,440	

FOR SECRETARY OF STATE.

Harry A. Conant, Republican.....	157,609—	8,487
William Shakespeare, Union.....	149,122	
Martin V. Kork, Prohibitionist.....	4,666	

FOR STATE TREASURER.

Edward H. Butler, Republican.....	158,948—	9,280
Lucien S. Coman, Union.....	149,068	
Emory L. Brewer, Prohibitionist.....	4,684	

FOR AUDITOR-GENERAL.

William C. Stevens, Republican.....	157,954—	8,617
James Blair, Union.....	149,387	
John H. Osborn, Prohibitionist.....	4,404	

FOR COMMISSIONER OF STATE LAND-OFFICE.

Minor S. Newell, Republican.....	158,424—	10,714
John F. Vandevanter, Union.....	147,710	
Edward C. Newell, Prohibitionist.....	4,490	

FOR ATTORNEY-GENERAL.

Jacob J. Van Riper, Republican.....	157,269—	7,988
Timothy E. Tarsney, Union.....	149,836	
John H. Tatem, Prohibitionist.....	4,248	

FOR SUPERINTENDENT OF PUBLIC INSTRUCTION.

Varnum B. Cochran, Republican.....	162,594—	14,084
David Parsons, Union.....	148,560	

FOR MEMBER OF STATE BOARD OF EDUCATION.

Bela W. Jenks, Republican.....	157,750—	9,252
Clark B. Hale, Union.....	148,498	
Isaac W. McKeever, Prohibitionist.....	4,352	

The vote for the straight Greenback candidates, not named, varied from 1,005 to 2,141. In the above table (copied from the "Michigan Almanac") the "defective" votes are given to the candidates for whom they were intended, while "scattering" votes are omitted.

The vote polled was not a full one, falling about 40,000 short of the vote on presidential electors in 1880.

In the congressional districts the vote was as follows:

FIRST DISTRICT.

William C. Maybury, Democrat.....	16,147—	4,989
Henry W. Lord, Republican.....	11,208	
William G. Brownlee, Free-Trader.....	778	

SECOND DISTRICT.

Nathaniel B. Eldredge, Democrat.....	15,251—	542
John K. Boies, Republican.....	14,709	
Albert J. Baker, Greenbacker.....	1,265	
Albert F. Dewey, Prohibitionist.....	860	

THIRD DISTRICT.

Henry C. Hodge, Union.....	16,239	
Edward S. Lacey, Republican.....	18,022—	1,784
George Landon, Prohibitionist.....	268	

FOURTH DISTRICT.

George Yapple, Union.....	16,828—	255
Julius C. Burrows, Republican.....	16,078	

FIFTH DISTRICT.

Julius Houseman, Union.....	16,725—	116
William O. Webster, Republican.....	16,609	
William H. Taylor, Greenbacker.....	429	

SIXTH DISTRICT.

Edwin B. Winans, Union.....	18,516—	82
Oliver L. Spaulding, Republican.....	18,484	
— Brewer, Prohibitionist.....	148	

SEVENTH DISTRICT.

Ezra C. Carleton, Union.....	11,540—	239
John T. Rich, Republican.....	11,251	

EIGHTH DISTRICT.

Charles J. Willetts, Union.....	18,918	
Roswell G. Horr, Republican.....	14,872—	954
Benjamin Colvin, Greenbacker.....	588	

NINTH DISTRICT.

Stephen Bronson, Union.....	10,897	
Byron M. Cutcheon, Republican.....	13,129—	2,232

TENTH DISTRICT.

Andrew C. Maxwell, Democrat.....	7,809	
Herschell H. Hotch, Republican.....	11,298—	8,489
Jesse Miller, Greenbacker.....	2,441	

ELEVENTH DISTRICT.

Peter White, Democrat.....	4,840	
Edward S. Breitung, Republican.....	11,298—	6,558
John Russell, Prohibitionist.....	881	

In the Forty-seventh Congress the delegation was solidly Republican. In the Forty-eighth Congress it will be divided: Democrats or Union, 6; Republicans, 5. The members of the Legislature elected are classified:

PARTIES.	Senate.	House.
Republicans.....	19	62
Democrats and Union.....	13	87
Workingman.....	..	1

Republican majority on joint ballot, 80.

Republican majority in the Legislature of 1881, 100.

Two constitutional amendments were voted upon: 1. Increasing the salaries of circuit judges from \$1,500 a year to \$2,500. This was adopted by a vote of: Yes, 85,765; No, 55,641. 2. Providing for a Board of County Auditors in each county, conditioned on the order of the Board of Supervisors (now the Auditing Board) of any given county. Rejected by a vote of: Yes, 23,892; No, 38,065.

The question of a general revision of the Constitution, which the Legislature is required to submit to the electors every sixteen years, was negatived by the following vote: For a revision, 20,937; against a revision, 35,123. The present Constitution was adopted in 1850. In 1866 a revision was voted for and carried. The convention which followed submitted a Constitution differing in many important features, but their work was rejected by the electors. The Legislature of 1873 provided for a commission to revise the organic law, and an extra session held in 1874 amended the commission's revision, and in November, 1874, it was defeated by the electors. The meager vote polled on the question at the last election, as given above, indicates that the mass of the electors care very little whether the Constitution of the State is revised or its outgrown features are perpetuated.

MINNESOTA. STATE OFFICERS.—The Governor of the State is Lucius F. Hubbard, elected in 1881; Lieutenant Governor, Charles A. Gilman; Auditor, W. W. Bradin; Secre-

tary of State, F. von Bombach; Treasurer, Charles Kittelson; Attorney-General, W. J. Hahn; Railroad Commissioner, James H. Baker. The term of the present Executive expires in 1885. The November elections of 1882 gave the Republicans a large majority in the Legislature. In the Senate there are 34 Republicans, 10 Democrats, and 3 Independent members; in the House, 76 Republicans, 28 Democrats, 2 Independents, and one Farmer's Alliance nominee—giving the Republicans a majority of 64 on joint ballot, and securing the return of a Republican Senator to Congress.

**FINANCES.**—The actual receipts from taxes and other sources of ordinary revenue, for the biennial period 1881-'82, exceeded the estimates by \$346,000, but the actual expenditures were \$764,000 in excess of the estimated amount. The revenue fund was overdrawn nearly up to the legal limit of \$150,000, because the Legislature, while making appropriations in excess of the usual amounts for ordinary purposes, and to meet various extraordinary requirements, had failed to increase the tax levy so as to provide sufficient revenue. The advances of \$142,810 were mostly taken from the trust funds of the State. The extraordinary expenditures were on account of the extra session of 1881, the Cox impeachment trial, the new Capitol, interest on the railroad readjustment bonds, etc. The Capitol-building, which was first to have been restored after the fire of March 1, 1881, at a cost of \$75,000, and then rebuilt at an additional cost of \$100,000, has finally been replaced, on the responsibility of the Governor, by a fire-proof structure at an outlay of about \$300,000.

The ordinary receipts for the two years were as follow:

RECEIPTS.	1881.	1882.
State tax.....	\$411,518	\$311,205
Railroad and telegraph taxes.....	380,025	470,556
Miscellaneous sources.....	70,717	107,719
Balance in Treasury November 30, 1880.	138,927	.....
Surplus.....	.....	10,684
Overdraft less balances.....	.....	115,745
Total.....	\$951,778	\$1,015,861

The disbursements for the State government and maintenance of the State institutions were as follow:

DISBURSEMENTS.	1881.	1882.
Legislature, regular session.....	\$73,206	.....
Legislature, extra session.....	46,132	.....
Impeachment court.....	.....	\$28,885
Executive.....	68,545	59,980
Judicial.....	69,796	79,502
Printing.....	88,689	83,208
Miscellaneous and overdrafts.....	143,000	70,095
Support of institutions.....	800,465	812,418
Interest on State bonds.....	19,485	11,706
Interest on railroad readjustment bonds.....	.....	88,086
Buildings.....	174,617	331,983
Total.....	\$924,952	\$1,015,861

The estimated expenditures for 1883 overrun the estimated receipts \$368,925, including the overdrafts already made, but part of the deficit

is expected to be made good by a surplus of \$167,500 in 1884.

The sources of revenue are expanding at a very rapid rate with the settlement and agricultural development of the State. The taxable property of Minnesota increased from \$258,055,543 in 1880, to \$311,200,841. The taxation for all purposes, State and local, in 1881 and 1882 is shown in the following table:

TAXATION.	1881.	1882.
State tax.....	\$379,689	\$741,666
Seed-grain taxes.....	56,616	12,000
General school (1 mill).....	270,737	310,116
Special school.....	1,190,086	1,381,361
County revenue.....	875,640	1,009,465
County interest.....	99,881	106,741
County poor.....	140,116	153,641
County special purposes.....	91,089	164,102
City taxes.....	807,898	1,135,261
Township taxes.....	297,018	303,785
Delinquent road.....	146,420	166,266
Interest on town bonds.....	72,624	120,799
Special city and town.....	271,505	526,122
Total taxes for all purposes.....	\$4,698,771	\$5,725,359

The average rate of taxation for all purposes was 17·3 mills in 1881 and 18·4 mills in 1882.

The total transactions of the State Treasury, including the sales of public lands and investments for the trust funds, conversion of investments, etc., reached \$1,979,558 of receipts and \$1,421,812 of disbursements in 1881, and \$3,201,416 of receipts and \$3,058,317 of disbursements in 1882. The allowance of 5 per cent on the sales of United States lands amounted to \$3,115 in 1881, and rose to \$49,561 in 1882; the sales of pine-timber on the State lands amounted to \$26,638 in 1881, and \$89,174 in 1882; principal paid on sales of school lands to \$37,025 in 1881, and \$20,718 in 1882; on former sales to \$134,774 in 1881, and \$210,863 in 1882; interest on contracts of school lands to \$171,587 in 1881, and \$167,157 in 1882; interest on sales and contracts of internal improvement lands to nearly \$100,000 for the two years; principal from sales of Agricultural College and University lands and interest on contracts, to about \$70,000. The interest paid on the permanent school fund bonds, amounting to \$103,698 in 1881, was \$81,225 in 1882; \$687,000 was realized from sales of United States bonds. A portion of the Missouri bonds held for the trust funds were also sold, and the main part of the trust fund investments converted into the new 4½ per cent railroad adjustment bonds, of which \$1,596,000 were taken for the several permanent funds: \$204,000 of State bonds of 1873 and 1878 were redeemed. The expenses of the university in 1881 were \$47,000; in 1882, \$43,881; the apportionments of school funds in 1881 were \$259,414; in 1882, \$259,097.

In accordance with the act of November 4, 1881, providing for the adjustment of certain alleged claims against the State, there were redeemed 2,232 Minnesota State railroad bonds of \$1,000, and other claims settled to the amount of \$53,088. For the settlement of the



recognized bonds and claims, \$4,253,000 of new  $\frac{4}{2}$  per cent bonds were issued. The only other acknowledged indebtedness of the State is \$25,000 bonds issued in 1873 for building purposes, which mature in 1883, and \$61,000 issued in 1868 for seed-grain distribution, for which the State is to be reimbursed by the counties. The people at the last general election approved the proposition for the application of the internal improvement land fund to the payment of the principal and interest of the railroad adjustment bonds. This will leave only an insignificant portion of the debt as a burden on the taxable resources of the people, as the lands are now marketable, and when all disposed of will swell the fund to at least \$3,000,000.

**EDUCATION.**—There was an increase in the enrollment of the public schools of 22,638 in the two years, the total number enrolled at the end of 1882 being 196,238, as against 173,600 in 1880. There were 567 new school-buildings erected, at a cost of \$759,022, making the total number 4,260, valued at \$3,947,857. The expenditures on the public schools for the two years amounted to \$3,844,866. The three normal schools, at Winona, Mankato, and St. Cloud, had an aggregate enrollment of 939 scholars in 1881, and 1,028 in 1882. Their combined expenses were \$45,859 in 1881, and \$46,081 in 1882. The schools graduated 129 teachers in two years. Aid was extended in 1882 to 38 schools under the act to encourage higher education. New buildings for the university are to be erected, for which appropriations have been granted and the plans adopted. The experimental farm in connection with the Agricultural College has been sold, and more suitable land acquired.

**STATE INSTITUTIONS.**—The State institutions of charity and correction were not calculated for the great additions to the population recently received, so that most of them require to be enlarged. The number of inmates in the State-Prison at the end of 1882 was 279, an increase of 29 in two years. The earnings were \$26,277 in 1881, and \$30,952 in 1882; the current expenses were \$49,964 and \$54,972. Additional walls are in construction, and increased cell-room is demanded. In the Reform School there were 123 inmates. The managers ask for the repeal of the law requiring the counties to maintain the youth they send to the institution. The expenses in 1881 were \$30,101; in 1882, \$31,550. In the Institute for the Deaf, Dumb, and the Blind there are now separate departments for the education of the mutes and the blind. The Imbecile School was removed to a new building in February, but its accommodations, as well as those of the school for the blind, are insufficient, there being 59 applicants waiting admission, for whom there is no room in the imbecile, and 84 blind and 233 deaf-mute youth who have never received instruction. There were 125 pupils in the deaf and dumb, 34 in the blind, and 41 in

the imbecile departments. The current expenses were \$44,278 in 1881, and \$49,807 in 1882. The burned portion of the Insane Hospital at St. Peter has been rebuilt, and the one at Rochester enlarged, but the 635 inmates of the former and 236 of the latter already tax their capacity. The weekly cost per capita in 1882 was \$3.82 at St. Peter, and \$4.18 at Rochester.

**TRADE AND INDUSTRY.**—The capital stock of the banks is reported by the Public Examiner as \$9,351,208 in 1882, and \$7,990,850 in 1881; the surplus funds as \$1,600,977 and \$1,191,425 for the respective years; the deposits as \$22,810,306 and \$20,109,435; loans and discounts, \$27,147,343 and \$22,910,609. This is only a partial exhibit of the banking business, as there are 116 private banks, many of which would not furnish reports.

The amount of insurance risks written in 1882 was \$122,070,500, 250 per cent more than ten years before; the amount of premiums collected, \$1,596,353; of losses paid, \$914,950—nearly three times as much as in 1872.

The total number of immigrants who settled in the State during the two years is estimated by the Secretary of the Board of Immigration at over 100,000.

The Surveyors-General of Logs and Lumber report 276,595,640 feet of logs scaled in 1882, and 260,045,720 in 1881 in the first district; and 312,211,780 feet in 1882, and 238,648,210 in 1881, in the second district. The quantity of lumber manufactured in 1882 is reported as 126,820,590 feet in the first, 423,009,250 feet in the second, and 239,000,000 feet as the estimated quantity in the fifth district.

The agriculture of Minnesota is improving in character as well as extending. Sections which have hitherto been devoted exclusively to wheat now produce a variety of crops. The State is also making marked progress in stock-raising, to which attention has been given only in the most recent time. Fine breeds of stock have been imported in considerable numbers and bought in various parts of the State for breeding purposes. The wheat production has increased every year, owing to the settling up of new lands, but in the older districts the acreage under wheat has diminished largely. Constant cropping and the chinch-bug have reduced the yield and made other crops more valuable. The rotative system of agriculture and stock-raising and dairying are important means for the preservation of the fertility of the soil, which are now introduced in earnest. The number of cattle in the State increased 100 per cent in 1882, of sheep 25 per cent, of hogs 40 per cent. The production of cultivated hay nearly doubled, of butter more than doubled, of cheese quadrupled, of wool more than doubled, of corn more than doubled, and of oats, barley, rye, buckwheat, etc., largely increased.

Flax has recently become a staple agricultural product of Minnesota. There were 505,-

717 bushels of flax-seed produced in 1881, on 83,947 acres, an average of a little over six bushels per acre. The acreage planted in 1882 was 98,309 acres and the estimated production about seven bushels per acre. Flax is planted not merely for the value of the product; it is usually sown as a first crop on newly broken ground, as it keeps out weeds and rots the sod, and is the only crop which can be raised the first year. When grown for the seed alone, it is not ordinarily profitable. The cultivation of flax for the fiber is still in the experimental stage. Besides the difficulty of securing a good fiber, it must be handled with great care. Most of the fiber grown in the Northwest is burned after thrashing.

During 1882 there were constructed within the State 531 miles of new railroad, making the total mileage 3,749 miles. The total cost is returned as \$149,312,631, or \$43,934 per mile. The value of the subsidies in bonds and lands given to the companies by the State of Minnesota is stated by the Railroad Commissioner to be \$76,489,790. The earnings of the lines within the States for the year ending June 30th were reported as \$4,816,218 from passengers and \$13,158,697 from freight; the total earnings as \$18,805,193; the operating expenses as \$10,221,783. There were 9,962,393 passengers carried and 5,883,120 tons of freight transported during the year. The amount of taxes paid to the State by railroad companies was \$470,593 in 1882, against \$315,482 in 1880, \$200,171 in 1878, and \$145,794 in 1876; the aggregate amount of taxes collected from the companies since 1864 was \$2,641,334. Two of the railroad corporations have refused to pay taxes on a part of their incomes, setting up a claim of legal exemption.

The war of rates between the lines of the Northwest, which arose from a dispute over "territorial rights" between the rival companies, called forth a cry of warning from Governor Hubbard. He reminded the companies that they were the creatures of the authority of the State; that it endowed them with valuable franchises and enormous subsidies, and afforded them that protection which gives to all property its greatest value; that their legitimate resources are derived from the patronage of the public, and that their proper and legal relation to the public can only be maintained by dispensing exact justice to every individual and locality. The Railroad Commissioner has elaborated a project for the regulation of rates by a Board of Control, based upon a classification of the roads according to income, and a maximum rate for each class. The question of regulating rates was decided in the negative by the Legislature in 1871, but the recent prosperity of the railroads has wrought some change in the public feeling. It is proposed to place telegraph companies on the same basis as railroads with respect to inspection and taxation, and to require sleeping-car companies to pay a tax on their income. More

effective legislation is demanded, to compel railroad companies to perform their duty as common carriers in the shipment of grain.

The question of public grain inspection is, next to the prohibition question, the most important and pressing subject that engages the attention of the Legislature in the second biennial session. The farmers generally complain of frauds and abuses practiced upon them in the warehousing and grading of grain. They are placed so entirely in the power of the buyers, whose judgment they must accept regarding the quality and value of their products, that the wrongs practiced upon them are exaggerated in their eyes. They consequently demand that a system of official grading, and the regulation of elevators and warehouses, such as has been adopted in other States for the protection of dealers from each other, should be adopted in Minnesota, to protect the producers from the dealers.

The exploration of large deposits of iron ore in the Vermilion Lake region has been begun on a large scale. The ore is of extraordinary value, it being the specular hematite variety, which is best adapted for the production of Bessemer steel. Analyses show 65 to 70 per cent of iron, with only 0.053 to 0.078 per cent of phosphorus.

**MISSISSIPPI. STATE OFFICERS.**—Governor, Robert Lowry; Lieutenant-Governor, G. D. Shands; Secretary of State, Henry C. Myers; Treasurer, W. L. Hemingway; Auditor, Sylvester Gwin; Attorney-General, T. O. Catchings; Commissioner of Agriculture and Immigration, E. G. Wall; Superintendent of Public Education, J. A. Smith. United States Senators, Hon. L. Q. C. Lamar and Hon. J. Z. George. Members-elect of the Forty-eighth Congress—H. S. Muldrow, First District; Van H. Manning (seat contested by J. R. Chalmers), Second District; E. Jeffords, Third District; H. D. Money, Fourth District; O. R. Singleton, Fifth District; H. S. Van Eaton, Sixth District, and Ethel Barksdale, Seventh District.

**FINANCES.**—The revenues of the State for 1882 and 1883 are computed as follows:

Taxation on real and personal property, on a total valuation of \$115,150,120, at the rate of 24 mills, the rate now fixed by law, will produce for two years.....	\$575,750 60
Cash in the Treasury.....	500,000 00
General tax on privileges.....	248,612 29
Collections of 1881 not reported.....	300,000 00
Probable revenue from Land-Office.....	40,000 00
Probable revenue through revenue agent.....	25,000 00
Derived from compromise with Mississippi and Tennessee Railroad.....	65,000 00
Total.....	\$1,549,362 89
Expenditures for the same period:	
Salaries.....	\$105,750 00
Appropriations.....	722,847 71
Immigration.....	25,500 00
Legislature.....	70,495 00
University of Mississippi.....	64,000 00
Common schools.....	600,000 00
Probable expenses not yet ascertained.....	100,000 00

Total expenditures.....\$1,688,592 71

Deducting this sum from the total revenue,



will leave a balance in the Treasury on January 1, 1884, of \$160,770.18.

To the above computation of cash in the Treasury January, 1884, should be added the taxes on 1,000,000 acres of land sold by the State, which will henceforth be subject to taxation. It should also be noted that the sum necessary to pay bonds maturing in 1883, amounting to \$100,000, is included in the item of "appropriations." The entire bonded debt of the State is \$518,150, with funds in the Treasury to pay it off at par, but the holders refuse to sell them except at such a high premium as the State officials are unwilling to pay.

A recent statement by Governor Lowry to this effect, in answer to a question as to the bonded debt of Mississippi, has been widely and severely criticised. It is charged that his statement that the debt only amounts to \$518,150, and could be canceled at once if the holders would sell their bonds at a reasonable premium, "is at variance with the facts as understood by others," alluding, doubtless, to the Planters' Bank and Union Bank bonds, payment of which is prohibited by an amendment to the Constitution, adopted and submitted by a Republican Legislature, and subsequently ingrafted on the Constitution by a Democratic Legislature. The amendment is as follows:

Nor shall the State assume, redeem, secure, or pay any indebtedness, or pretended indebtedness, claimed to be due by the State of Mississippi to any person, association, or corporation whatsoever, claiming the same as owners, holders, or assignees of any bond, or bonds, now generally known as Union Bank bonds, or Planters' Bank bonds.

The Governor was asked for information as to the recognized debt of the State, and, answering in his official capacity, could not be fairly expected to include a claim which is expressly barred by the Constitution he has sworn to support, however opinions may differ as to the propriety of the amendment, which places the Planters' Bank bonds on the same footing as the Union Bank bonds.

The rate of taxation, low as it is, compared with that of other States, might be much reduced were the assessments of property for taxation equal and uniform throughout the State, as the Constitution and the law require. But when assessors are lax or derelict in their duty, and tax-payers undervalue the property, the honest tax-payer has good reason to complain of the undue burden imposed upon him. The State holds for sale at \$6 per acre, about 34,000 acres of what are known as the Chickasaw School lands; and 22,000 acres of internal improvement lands at fifty cents per acre. Within the past two years 1,300,000 acres of levee, swamp, and overflowed lands have been sold to parties mostly outside of the State, by the Board of Levee Commissioners, under a decree of the Court of Chancery. The proceeds of these sales, as they become available, will add

considerably to the public revenues. The Auditor of Public Accounts has on his books upward of 1,000,000 acres of land forfeited for non-payment of taxes which are offered for sale at a very low price. The United States holds for sale or for homestead about 3,500,000 acres in the State, situated mostly in the long-leaf pine-region, extending from the Vicksburg and Meridian Railroad to the Gulf of Mexico. These lands are heavily timbered, and might be converted into admirable sheep-walks. The Government price is only \$1.25 per acre. The estimated number of feet (board measure) of pine-timber now standing in the State reaches, within a small fraction, 25,000,000,000.

EDUCATION.—The cause of public education has been promoted by wise and liberal legislation, and the prospect is more promising than it has ever been. The distributive common-school fund has been increased from \$200,000 to \$300,000, and the limit upon levying taxes for school purposes which hitherto existed—"not to exceed three mills"—has been removed, so that the county supervisors of education may now in their discretion levy a greater tax, which, with other taxes, shall not exceed the aggregate fixed by law. In counties where a sufficient number of educable Indians are found to reside, schools for their exclusive use are authorized to be kept open for the same time as the other public schools. Until January 1, 1886, the basis of distribution of the common-school funds of the State shall be forty per cent of the total population of each county, as shown by the report of the State census of 1880. Several thousand dollars in the Treasury to the credit of the two and three per cent funds are to be applied to common-school purposes, to be used by supervisors in the construction of good houses where needed, and in the repair of those already built. Liberal appropriations were made to the Agricultural and Mechanical College at Starkville, for the erection of new buildings, purchase of land, stock, implements and apparatus, also to the University of Mississippi at Oxford, and to the educational institutions of the colored people—the Alcorn University, the Normal School at Holly Springs, and the Tougaloo University. The representatives of the State in the Federal Congress were requested and instructed by the Legislature to present a memorial to Congress asking aid in maintaining and improving the free-school system, as the danger and obligation connected with illiteracy are not merely local in their character. Among the other judicious acts of the Legislature in reference to education, that prohibiting the sale or giving away of intoxicating liquors within five miles of the University of Mississippi deserves special mention. In addition to the 5,200 common schools in the State, where upward of 425,000 children, white and black, are regularly taught, there are 969 private schools, and for the higher education of both

racess there are the following institutions, most of which are, in whole or in large part, supported by the State: 1. The University of Mississippi at Oxford, in Lafayette County, for white students exclusively. Here tuition is free, except in the law school. The average annual attendance is 250. The State has appropriated \$64,000 for the support of the university, repairs, etc., for the years 1882 and 1883. The board of trustees, at their meeting in June, took a new departure and threw open the doors of the university to females, in concession to the public demand for enlarged educational opportunities for the women of the State. Two restrictions are placed on their admission, namely: first, that they shall not be allowed to board in the campus, except in the families of the professors; and, second, that they may not enter the preparatory department.

2. The Agricultural and Mechanical College at Starkville, Oktibbeha County, is also exclusively for whites. Here also tuition is free, and many of the students are enabled to pay the greater part of their expenses for board by their earnings on the farm connected with the college, where they are daily instructed in the practical details of agriculture, horticulture, and stock-raising. There were 250 students in attendance during the year.

3. The Alcorn University, at Oakland, Claiborne County, is exclusively for colored students. Tuition is free, and the expenses of the college are almost entirely defrayed by the State. The average attendance is a little over 100 students.

4. The Tougaloo College, at Tougaloo, Hinds County, is exclusively for colored students of both sexes. It was established by some benevolent individuals at the North, and receives annually \$3,000 from the State. Tuition is free, and the average attendance is about 125.

5. The State Normal School at Holly Springs, Marshall County, is devoted altogether to the education and training of colored teachers to serve in the common schools. The State sustains it by an annual appropriation of \$8,000. Nine tenths of the taxes levied for the support of the free schools and the endowed colleges are paid by the white tax-payers, and the liberality of the last Legislature in its appropriations for educational purposes shows that the taxation is cheerfully borne, and the benefits of diffused education are duly appreciated.

**STATE BENEVOLENT INSTITUTIONS.**—The Lunatic Asylum, near Jackson, is well managed, but has been found quite inadequate to accommodate the number of the insane for whom admission is sought. At the beginning of the year there were 416 patients in the asylum, or 75 more than it can accommodate comfortably. Besides these, it was estimated that there were 75 insane people in the county jails, and 150 at their homes, where they can not be treated with any reasonable expectation of improving their condition. The death-rate has been un-

usually large among the patients, owing in great measure to the crowded state of the institution. The Legislature has employed the only remedy for this by authorizing the building of another asylum in the eastern part of the State, capable of accommodating 300 patients.

**THE INSTITUTION FOR THE EDUCATION OF THE BLIND**, at Jackson, since the erection of the new building authorized by the Legislature, gives instruction in literature and music, as well as in domestic economy, and certain useful handicrafts, to between 75 and 100 blind children. The present buildings are well arranged, furnished, drained, and heated, and the comfort of the inmates well provided for.

**THE STATE DEAF AND DUMB INSTITUTION**, also at Jackson, is under capable management, but has been inadequate for the number of applicants for admission. The pupils are instructed by signs, the manual alphabet, and writing, and the superintendent proposes, when practicable, to teach the male pupils useful trades, such as printing, carpentering, and shoemaking. The Legislature has made provision for the erection of suitable buildings for the colored mutes, which will render the present institution capable of fulfilling the objects for which it was established.

**RAILROADS.**—Several railroad enterprises have been completed, or are in process of construction, within the State, which will be of incalculable benefit in advancing the material prosperity of the people, besides expending in the State between fifteen and twenty million dollars in the next two years. The Erlanger Syndicate, who bought the old Southern Road, running east and west across the middle of the State, and are relaying it with new steel rails, are also building a road from Meridian to New Orleans, running 160 miles diagonally across the southern portion of the State, opening up the great pine-lands of that section. The road from Natchez to Jackson has been completed. The directors of the Chicago, St. Louis, and New Orleans Railroad have determined to build a road from Jackson to Yazoo City, and have already begun the work. The most important enterprise is that of Mr. R. T. Wilson, of New York, who is building a railroad from New Orleans to Memphis, running parallel with the Mississippi River, and for upward of a hundred miles traversing the most fertile lands on the continent, besides opening up vast forests of cypress, oak, poplar, and walnut timber. The old Memphis and Selma Railroad has been revived and placed under contract, which will traverse diagonally the northern part of the State from northwest to southeast. The old roads have been much improved, and the rates of freight and travel reduced. A bill to create a Board of Railroad Commissioners, similar to that existing in Georgia, "to provide for the regulation of railroad companies and persons operating railroads in the State of Mississippi," passed in the House of Representatives by a large majority, but



failed to pass the Senate. A general law was passed this year exempting from taxation for ten years all railroads constructed hereafter within the State.

**LEGISLATURE.**—The biennial session of the Legislature, having lasted for fifty-seven working days, adjourned March 9th. A large number of bills were passed, among which were several prohibiting the sale of vinous and spirituous liquors at certain localities. An excellent bill for the encouragement of immigration was adopted. Liberal provision was made for the support of the educational and benevolent institutions of the State. Charters were granted to a number of new railroad companies. A new congressional apportionment bill was passed, which provides for an additional (the seventh) district, as follows:

First District: Tishomingo, Alcorn, Prentiss, Itawamba, Lee, Oktibbeha, Lowndes, and Monroe.

Second District: Tippah, Union, Benton, Marshall, Lafayette, De Soto, Tate, Panola, and Tallahatchie.

Third District: Clay, Chickasaw, Yalobusha, Pontotoc, Grenada, Carroll, Montgomery, Calhoun, Webster, Choctaw, Winston, Noxubee, and Kemper.

Fourth District: Tunica, Quitman, Sunflower, Coahoma, Bolivar, Washington, Issaquena, Sharkey, Warren, and LeFlore.

Fifth District: Holmes, Yazoo, Leake, Attala, Neshoba, Scott, Newton, Lauderdale, Smith, Jasper, Clarke, and Wayne.

Sixth District: Hinds, Rankin, Copiah, Franklin, Lincoln, Madison, Claiborne, Jefferson, and Simpson.

Seventh District: Jackson, Harrison, Perry, Greene, Hancock, Marion, Pike, Amite, Covington, Adams, and Wilkinson.

A proposition was made and strongly supported to establish and endow a State Female College, for the higher education of females, but it was not adopted. An amendment to the Constitution proposed by the House of Representatives, for the election of judges by the Legislature, was defeated in the Senate.

Governor Lowry's inaugural address to the joint convention of the State Legislature, in January, contained many sentences worthy of consideration by Southern agriculturists. With reference to the general neglect of diversified farming, he says: "In a material point of view our almost exclusive devotion to the production of a single article of industry is our bane. We buy too much and sell too little. Our corn-cribs and smoke-houses are too far from home. Our income is princely, our expenditures are utterly exhausting. Legislation may do something to remove these barriers to our progress, but individual enterprise and exertion must do much more." As to the practical duties of government, and the proper limits of legislation, he says: "When life, liberty, and property are secure, when the public morals are protected, an efficient system of public education established, and the public health, convenience, and safety well guarded, and all at the smallest practical cost, there is but little omitted from the fundamental obligations of government. Under these conditions, individual action, diversity of interest, and, above

all, the production of the necessities of life at home, ought to cause the springs of prosperity to flow, and insure contentment, progress, and independence. . . . Whoever, either in a public or private capacity, contributes to diversify the industries of Mississippi, and to relieve her from dependence on other States and countries, is a benefactor to the State. The president or managers of a successful factory among us ought to be more highly appreciated and honored by us than any public functionary in the land. . . . A people who have proved themselves to be equal and superior to the exigencies of peace and war, such as those under which other States and nations have perished, can not be incapable of improving and appropriating the advantages and opportunities we enjoy." These remarks are very pertinent when it is remembered that Mississippi, of the Southern States, is almost, if not quite, the largest producer of cotton; that she has only nine cotton-mills, with 704 looms and 26,172 spindles, whose annual production exceeds by nearly half a million of dollars the capital invested, and that she clips only 734,000 pounds of wool, when she might easily grow ten times that quantity and manufacture it into cloth.

**INDUSTRIAL.**—There are several cotton and woolen factories in the State, some of which are very prosperous and some reasonably so. The largest and most productive of these is the Mississippi Mills, at Wesson, Copiah County, 138 miles from New Orleans, on the Chicago, St. Louis, and New Orleans Railroad; of the others, the Natchez Cotton-Mills, and the Rosalie Cotton-Yarn Mills, at Natchez; the Stonewall Manufacturing Company, at Enterprise; the Wanita Cotton and Wool Mills, seven miles northwest of Enterprise; Ulman's Woolen Mill, at Ulmanville, in Hancock County; the Yocona Cotton-Yarn Mills, at Water Valley; the Strawberry Cotton-Mills, near Carrollton (now owned by General John B. Gordon, of Georgia); the Canton Cotton-Factory; and the two cotton-factories at Corinth, are the most successful and prosperous enterprises. The Legislature, at its late session, in order to encourage manufactures in the State, passed a law exempting "all factories hereafter erected" from taxation for ten years. Fruit-culture, grape-growing, and wine-making are among the "infant industries" to which a portion of the people are giving attention. The culture of jute promises to become a leading industry. Jersey cattle are being introduced on the upland farms in many portions of the State, and large sums are paid, with the general object of improving the quality of the cattle, and with the purpose, in some cases, of establishing dairy-farms. Colonel Thomas W. White, of Hernando, De Soto County, has the largest herd for dairy purposes in Northern Mississippi. Large and valuable deposits of gypsum have been discovered near Shubuta, Clarke County.

**THE CONGRESSIONAL ELECTIONS** for members

to serve in the Forty-eighth Congress passed off peaceably. A troublesome dispute has arisen in regard to the election in the Second District, in which Hon. Van H. Manning, Democrat, and General Chalmers, Independent, were the opposing candidates. On counting the votes in the office of the Secretary of State, it appeared that in Tate County 1,472 ballots were cast for J. R. Chalmers, and 1,166 for Van H. Manning. These facts were certified by the three Commissioners of Election for Tate County, but the tally-sheet accompanying the certificate read as follows: "For Congress, Van H. Manning, 1,166; for J. R. *Chambless*, 1,472." On this showing the Secretary of State felt compelled to issue the certificate of election to Mr. Manning, though there is no doubt that General Chalmers received a large majority of the votes cast. The question is, whether the return of the Commissioners of Election, stating that J. R. Chalmers received 1,472 votes, or the tally-sheet showing that J. R. *Chambless* received 1,472 votes, should properly govern the decision of the Secretary of State. Public opinion is pronounced in favor of Chalmers, although that gentleman has become exceedingly obnoxious to a majority of the people of the State, and Mr. Manning is universally respected and esteemed. Hon. L. Q. C. Lamar was re-elected to the United States Senate by a large majority of both Houses of the Legislature.

**MISSOURI. STATE OFFICERS.**—The Governor of the State was Thomas T. Crittenden, elected in November, 1880; Lieutenant-Governor, Robert A. Campbell; Secretary of State, M. K. McGrath; State Auditor, John Walker; Attorney-General, Daniel H. McIntyre; State Treasurer, Philip E. Chappel; Supreme Court Judge, Robert D. Day; Railroad Commissioner, George C. Pratt; Register of Lands, Robert McCulloch.

**FINANCES.**—The finances of the State are in a very satisfactory condition. The obligations of the State are promptly met, and every legal demand made upon the Treasurer is paid as soon as presented. During the present administration not a warrant of the State has been discounted because of non-payment; nor is there a warrant outstanding. Heretofore warrants have been issued and sent to the various civil officers and other claimants throughout the State, and, before the warrants were or could be cashed, they were discounted by some person or bank in the locality to which they were sent. Now the warrants are sent by the Auditor to the Treasurer, who issues a draft therefor upon the Bank of Commerce of St. Louis, upon which the money is received without delay or discount. The whole indebtedness of the State on January 1, 1883, was \$13,979,000. Of this amount \$3,031,000 is in the form of certificates of indebtedness to the school and seminary funds, which will be due in 1911. This part is an amount which the people owe to themselves. The debt will probably never

be canceled, as the interest on it goes to the common schools and the State University. It is but a medium of collecting a tax for the support of education. The debt proper, therefore, of the State amounts to \$10,948,000, and bears 6 per cent interest. The assessment of property for taxation for 1882 was \$649,267,242. It will be observed, therefore, that the interest charge on the people is really only about one mill—one tenth of one per cent. The last of this debt will fall due in 1895. With the certain increase of property and the constant decrease of the interest charge, the debt will be extinguished at the period named—twelve years from now. The constitutional provision on this subject irrevocably fixes the interest and sinking fund as follows:

There shall be levied and collected an annual tax of one fifth of one per centum (twenty cents on the hundred dollars) on all real estate and other property and effects subject to taxation, the proceeds of which shall be applied to the payment of the interest on the bonded debt of this State as it matures, and the surplus, if any, shall be paid into the sinking fund, and thereafter applied to the payment of such indebtedness and to no other purpose.

During the two years of the administration of Governor Crittenden, the public debt has been reduced \$712,000; of which \$252,000 was paid in 1881, and \$460,000 in 1882. This sum shows the amount of bonds taken up and retired since January 10, 1881, with the surplus revenue, proper, of the State, and does not include the \$250,000 renewal revenue bonds—also paid in 1881—issued under act of May 9, 1879, making a total reduction of \$962,000 of the liabilities of the State. If other bonds could have been called during this year, or purchased at a reasonable premium, there is now sufficient surplus revenue on hand to retire \$300,000 more of the State's indebtedness. At no previous period has the State's indebtedness been so rapidly diminished, or the State grown so rapidly, in those elements which give a State a character at home and abroad, as within the last two years.

**LOCAL INDEBTEDNESS.**—The bonded indebtedness of the counties, as shown by the report made by the Auditor under date of January 1st, is \$10,840,082, and that of the townships \$2,649,331—total, \$13,489,414. The interest on much the larger proportion of this is promptly paid and a sinking fund provided for the liquidation of the principal. No more county or township debts are created. It is, therefore, safe to say that when the State debt shall be extinguished, in 1895, there will be little of the county and township indebtedness left.

The bonded indebtedness of cities and incorporated towns in Missouri, omitting St. Louis, is small. The amount is set down at \$3,938,970. Of this amount Kansas City and St. Joseph owe about one half. So that, outside of St. Louis, St. Joseph, and Kansas City, the cities and towns of the State owe only about \$2,000,000. The debt of St. Louis is nearly



equal to that of the State—omitting the certificates to the school and seminary funds—the counties and the towns combined. But all these debts are reduced. They represent a vast amount of public property, of which the people have the benefits. In many instances the amounts contracted were vainly large, and the mode of expending them profligate and dishonest. But the proposed objects were desirable, and the fruits in a majority of the cases have proved of great benefit. Four fifths, perhaps, of the counties and towns have court-houses, bridges, poor-farms, and railroads, whose construction was hastened or was wholly due to these debts, which they would not now part with for much larger amounts than they have become responsible for in getting them. The debt of St. Louis stands for improvements and property which go far toward reconciling the tax-payers to the burden. Among the things the city has to show for its bonded indebtedness are hospitals, water-works, harbor improvements, sewers, insane asylums, market-places, jails, court-houses, the great bridge over the Mississippi, parks, and squares, possessing a value which will be readily perceived by even the most unreflecting.

But the leading consideration in connection with the subject of all these debts is, that, excepting that of St. Louis, they are being fast liquidated, and that a vast amount of capital will in the next few years thus be forced into active channels. Taxation will grow light, and the people will be left free to employ their increased resources in all the improved avenues of production.

**STATE CLAIMS.**—The claims of the State consist of two kinds: First, war claims, or claims arising out of the furnishing of troops and supplies to the United States Government during the late civil war; and, second, claims arising under the enabling act of Congress and the ordinance of acceptance by the State, under which the State was admitted into the Union. This compact guaranteed to the State, in consideration of certain conditions by it accepted, 5 per cent of the net proceeds arising from the sale of all public lands in the State of Missouri after admission, etc. The amount due the State on account of all sales made for cash has been paid; but as a large proportion of the public domain in the State has been located with the military land warrants of the Government, issued in payment of services rendered by her soldiers in various wars, such locations should be regarded as sales for cash, and the State is entitled to 5 per cent thereon. These locations cover about eight million acres, and the five per cent of the proceeds of such sales—estimating the land at the price of \$1.25 per acre—amounts to \$426,000.

The war claims are of two classes: First, those belonging to the State; and, second, those belonging to individuals, which the State is attempting to collect.

By an act of Congress of July, 1861, the

United States Government promised to reimburse the different States for amounts expended by them, respectively, in the organization equipment, and maintenance of troops while acting under competent military authority and in concert with the Federal troops. Under that law, a settlement between the State and the General Government was effected in 1866, by which the State received the amount then shown to have been expended by it up to that date; and it was on account of similar disbursements, subsequently made by the State, that a claim was preferred for the amount not reimbursed by the Government.

The other class of claims, or those belonging to individuals, are those which were, by authority of an act of the Legislature, approved March 19, 1874, audited by a commission created by said act, and on account of which audit and allowance conditional certificates of State indebtedness were issued. These claims have been presented to the Government for payment; but, so far, have been refused consideration upon the ground that, even if they are just, the present laws of Congress only authorize their examination for settlement after they shall have been paid by the State, and that the issuance of conditional certificates of State indebtedness is not payment, as contemplated by the law.

**TAXABLE PROPERTY.**—The total taxable wealth in Missouri, exclusive of railroads, telegraphs, and bridges, returned for 1882, is \$615,000,000, and of this amount \$190,145,000 is returned from St. Louis city. The total amount of State taxes assessed for 1882 was \$2,462,000, and of this \$760,000 was assessed against St. Louis city. It will be seen that nearly one third the taxable property of the State is in St. Louis, and that it pays nearly one third the whole State revenue derived from property tax. The collections from merchants and manufacturers' tax-books in 1881 were \$179,000, of which sum \$106,000 was collected from St. Louis, and the *ad valorem* taxes and licenses collected in 1880 were \$200,000, of which St. Louis paid \$108,000. The whole amount of revenue paid into the State Treasury from the general property tax, merchants' and manufacturers' taxes, and licenses, was, therefore, \$2,841,000; and of this St. Louis paid \$974,000, or more than one third. Next to St. Louis in the amount of general property taxes paid comes Jackson County, with \$135,000; then St. Louis County, \$72,000; next Buchanan, \$53,000; next Saline, \$36,400; next Nodaway, \$26,000; next Lafayette, \$32,000. The counties paying the smallest amounts are Ozark, \$644; Carter, \$877; and Taney, \$885. The counties that show the largest landed property, not including town lots, are St. Louis, \$15,854,000; St. Louis city, \$11,358,000; Jackson, \$8,122,000; Nodaway, \$5,244,000; Saline, \$5,157,000; Lafayette, \$4,884,000; Bates, \$4,240,000. The counties showing the smallest amount of landed property are Ozark, \$131,000; Ta-

ney, \$193,000; Douglas, \$275,000; Stone, \$286,000; Carter, \$336,000.

#### STATE SCHOOL FUNDS.

Total amount of permanent productive funds in the several counties (county, township, etc.) and in the city of St. Louis.....	\$6,124,083 84
Add State fund (proper).....	2,912,517 66
Add Seminary fund.....	122,095 08
Add Agricultural-College fund (sale of lands)...	218,000 00
Total.....	\$9,371,696 58
Add University fund (bonds not heretofore reported).....	200,000 00
Total.....	\$9,571,696 58

Comparing these figures with those given in the last published report of the School Department (1880), there is an increase in the county funds:

Actual increase, or part not heretofore reported by county clerks in two years, of.....	\$205,165 87
In the State fund of.....	2,275 00
And the University funds of.....	818,000 00
Total increase.....	\$520,890 87

The report of 1880 showed that Missouri was the second State in the Union in the amount of permanent funds set apart for public education—Indiana surpassing her \$114,449.02. But as Indiana has no county or township funds, and no fixed or certain provisions for the increase of her State fund, Missouri has advanced beyond her, and now has considerably the largest amount of funds devoted to public education of any State in the Union.

Nor does the amount above given represent all of the school funds. The fines, forfeitures, and penalties realized during the year belong to the county school funds.

#### SCHOOL CENSUS OF 1882.

Total enumeration.....	741,632
Total enrollment.....	488,091
Per cent of enrollment to enumeration.....	65.81
This is an increase (in two years) of enumeration of.....	18,143
And an increase (in two years) of enrollment of.....	5,105

Considering the facts that the school age is between six and twenty years (covered by the enumeration); that very few attend school after the eighteenth year, and very many not after the sixteenth year; that the enrollment does not include those attending private, denominational, or parochial schools of other States; while the enumeration includes all of these, the per cent of enrollment or attendance is scarcely surpassed by that of any other State.

#### SCHOOL STATISTICS.

Expenditures for the last school year.....	\$3,468,737 67
Which is a per capita, on enumeration, of.....	4.677
Which is a per capita, on attendance, of.....	7.106

It must be borne in mind that five large, wealthy, and populous counties make no report of expenditures (on account of township organization), while they do report school population and receipts. The five doubtless expended \$150,000 for schools.

School-houses owned.....	8,273
Increase over 1880.....	28
Schools in operation (white), 8,321; (colored), 501—total.....	8,822
Increase (white), 172; (colored), 9—total increase.....	181

Teachers' wages paid.....	\$2,226,609 58
Increase over 1880.....	8,972 22
Number of teachers employed.....	10,607
Decrease since 1880.....	1,052
Average salaries paid teachers per year.....	\$209 91

It is impossible to tell the average number of months schools have been taught, owing to the defective reports made to the superintendent's office; but, assuming that average to be five months, the average monthly salary of teachers would be \$41.98.

The estimated value of school property in the State, exclusive of the university, four normal schools, and the schools for the Blind and Deaf and Dumb, is \$7,521,695.08.

An increase since 1880 of.....	\$168,293 86
The estimated seating capacity of the schools is..	516,942
An increase of.....	27,807

The total amount of taxes levied by the school districts (DeKalb and Macon not included) is \$2,286,191.66, which is \$0.41 on the \$100 of assessed valuation of taxable property for State and county purposes.

**RAILROADS.**—In his message to the Legislature, at the session in January, 1883, Governor Crittenden made these remarks relative to the railroads in the State:

Section 17 of Article XII of the Constitution forbids the consolidation of parallel or competing lines of railroads within this State. This section was not inserted in the Constitution for the purpose of arraying the police power of the State against the roads, but to prevent their franchises and privileges from being used against the interests of the people, and converted into powers to oppress those who invoked them into existence. I do not know that such consolidations as are prohibited by the Constitution have taken place. It is worthy of the consideration of the proper tribunal, and should receive judicial investigation. The Constitution declares that the question shall be decided by a jury upon proper issues made in the courts. The liberties of no people are safe who suffer their laws or organic acts to be violated by any individual or combination of individuals. If one or more corporations have disregarded this section of the law, they should be dealt with in the manner prescribed by the law. Those immense powers should yield implicit obedience to the law like individuals, receiving its benefits and protection when in submission to its requirements, and its punishments and penalties when they defy its powers. There should be the most amicable feelings between these corporations and the State, each being essential to the prosperity of the other.

**THE INSANE.**—There are 500 patients in the asylum at Fulton, 250 in the one at St. Joseph, and 400 in the one at St. Louis. But this aggregate of 1,150 does not represent one half the number of insane in the State. According to the report of the special committee appointed to visit the institutions there are 2,300 insane persons in the State outside the asylums. Of this number about one fourth are in county poor-houses and jails, and the other three fourths at their homes. More than one half the whole number of insane persons in the State, therefore, are without the treatment that would ameliorate their unhappy condition, if it did not restore them to reason and usefulness. The number is constantly increasing with the increase in the State's population. All the asylums are crowded as they should



not be, and the committee point out the urgent necessity for erecting new asylums, or enlarging the existing ones. In all the institutions there is a sitting-room for each hall. All these sitting-rooms are now provided with cots. It was originally intended that each patient should have a small, separate room; but the pressure upon the asylums has caused this to be abandoned, and in some of the buildings as many as eight patients are now quartered in one room, and the halls are provided with cots, in which patients sleep at night, but which have to be removed in the day. The cost to the State of the 1,150 patients in the asylums is about fifty cents a day each.

The State has been rid of a notorious band of robbers by the efficiency of Governor Crittenden. He alludes to the subject in his message to the State Legislature, and says:

I paid \$20,000 in rewards to various persons for the capture and overthrow of this band of desperadoes, not one dollar of which was taken from the State Treasury. It is not probable that Missouri will again be cursed and disgraced by the presence of such a band of men, confederated together for desperate purposes. It is fully redeemed and acquit of that unwarranted appellation of "robber State." But an insignificant number of people in two or three counties gave countenance to such lawlessness. Our people, with one accord, heartily approve of the measures and means employed to compel these violators of the law to confess its power and majesty, and applaud the stern, unbending determination of the officers who contributed so much to the fulfillment of that purpose.

It is done; and Missouri is to-day one of the most peaceful States in the Union. Fewer crimes are committed within her borders than in those of surrounding States.

Since my inauguration, three other lawless bands were formed and operated in different portions of the State. The "Meyers gang," composed of six men, was organized in New Madrid County for the purposes of robbery and murder. Within a few weeks after its formation two of its members were shot to death while resisting arrest, two were captured, tried under the law and executed, and the other two were sent to the Penitentiary for their crimes.

A band known as the "Mason gang" was organized in Adair County, for the purpose of robbing banks and committing other crimes. It consisted of four men, under the leadership of Frank Mason. In the month of June, 1882, they robbed a bank at Brookfield, Mo. Within one week from the date of the robbery these men were captured, indicted, tried, and sentenced to twenty-five years' imprisonment each in the Penitentiary. The Lewis brothers formed a band in Jasper County for similar purposes. Within a few weeks after commencing their lawless career they were captured and are now in jail awaiting trial.

A system of "high license" has for some time been in operation in the State. It seems to have been successful, as appears by the following facts: In Carrollton, a town of 2,500 inhabitants, there are only six saloons, which pay a revenue of \$3,000—half enough, probably, to meet all the expenses of the city government. In Clarksville, with a population of 2,500, there are only two saloons, which pay \$600 each. In Carthage there are four, which pay \$800 each. In Fulton there are three, which pay \$3,763 a year to the city—quite

one half the whole revenue, if not more. In Higginsville there are four, which pay \$1,600 a year. In Kirksville there are two, which pay in a revenue of \$1,400. In Louisiana there are seven, which pay \$4,800 a year. In Lamar there are four, which pay \$2,400 a year. In Maysville there are eight, which pay \$9,000 a year. In Mexico there are four, which pay \$5,200 a year. In Marshall there are four, which pay \$2,400 a year. In Linneus there is one, which pays \$600 a year. In Neosho there are two, which pay \$1,000 a year.

In those towns where the number of saloons is much greater the revenue yielded by them is much smaller, and it may be added that the general results are less satisfactory. Thus Boonville has ten saloons, which yield only \$1,257 in the aggregate. Cape Girardeau has twenty-three, but the revenue from them all is only \$1,725, less than half as much as Fulton derives from four. Fayette has eight, which yield only \$793. Hermann has fourteen, which only yield \$210. Jefferson City has twenty-seven, which yield only \$1,295. Kansas City has two hundred and thirty-nine, which pay \$46,000. Lexington has sixteen, which pay \$1,600. Sedalia has thirty-three, which pay \$3,730—about the same as Fulton derives from four. St. Charles has twenty-eight, which pay \$1,120. St. Joseph has one hundred and eighty, which pay \$12,000.

It would appear clear enough from this that the greater the number of saloons in a place the less aggregate revenue they pay, and that the most effective way of securing substantial revenue from them is to charge them a license so high as to reduce the number.

The State election, held in November, was for the choice of a Judge of the Supreme Court, a Railroad Commissioner, and a Superintendent of Schools.

For Supreme Court Judge—Sherwood, Democrat, 198,620; Wagner, Republican, 128,239; Rice, Greenback, 33,407.

Railroad Commissioner—Harding, Democrat, 202,137; Hunt, Republican, 125,591; Ritchey, Greenback, 32,576.

Superintendent of Schools—Coleman, Democrat, 202,855; Hill, Republican, 124,759; Booth, Greenback, 32,264.

Sherwood's plurality over Wagner, 70,381; majority over all, 36,974.

Harding's plurality over Hunt, 76,546; majority over all, 43,970.

Coleman's plurality over Hill, 78,096; majority over all, 45,832.

The constitutional amendment increasing the number of Judges of the Supreme Court to six, and dividing the court into two branches, was lost: yeas, 44,149; nays, 142,742.

The Legislature chosen was divided as follows:

PARTIES.		Senate.	House.
Republican.....		6	32
Democratic.....		25	104

The vote for Representatives in Congress was as follows:

Dist.	Republican.	Democratic.	Greenback.
1.. Glover.....	11,407	Hatch..... 16,243	Leavitt.... 667
2.. Dorsey.....	8,628	Alexander.. 19,039	Quayle... 5,302
3.. Thomas.....	12,887	Dockery... 17,261	Burrows... 2,489
4.. Reed.....	10,571	Barnes.... 19,325	Sisson.... 2,185
5.. Crisp.....	8,672	Graves.... 12,695	McCabe... 243
6.. Aldredge....	11,849	Cosgrove... 17,149	
7.. Daudt.....	9,857	Buckner... 14,370	McNair... 1,736
8.. Sessinghaus.	5,514	O'Neil.... 7,240	
9.. McLean.....	6,759	Broadhead. 6,560	Hill..... 463
10.. Manistre....	7,455	Clardy.... 13,536	Jackson... 2,667
11.. Wallace.....	10,580	Bland..... 14,259	Quinn.... 1,187
12.. Terrell.....	9,111	Morgan.... 14,768	Spring.... 3,559
13.. Cloud.....	12,424	Fynn..... 13,904	Haseltine.. 6,123
14.. Carroll.....	7,177	Davis..... 14,023	Kitchen... 2,920

The Democratic pluralities in the last four preceding elections were: Hancock over Garfield in 1880, 55,000; Crittenden over Dyer for Governor, 54,000; Tilden over Hayes in 1876, 58,000; Phelps over Finkelnburg for Governor, 52,000. The Democratic plurality over the Republican vote, therefore, has run pretty evenly at 52,000 to 55,000 for the last six years. But in the recent election it rose to 78,000—an increase of 50 per cent. The change in public sentiment in Missouri as manifested in this election of November, 1882, was a part of the same movement which produced such astonishing results in New York, Pennsylvania, and elsewhere. (See UNITED STATES.)

## N

NAVIES OF EUROPE. THE BRITISH NAVY.—The naval operations before the city of Alexandria have directed attention to the efficiency of the latest models of armored war-ships and the heavy ordnance which they carry. The most effective work in the destruction of the forts was done by the British iron and steel-clad vessels *Inflexible* and *Téméraire*. The former is a turret-ship of 9,515 tons displacement, an indicated power of 8,483 horse, 23 feet draught, and a speed of 14.74 knots. She

towers. Her displacement is 8,571 tons; indicated horse-power, 7,516; draught, 27 feet 4 inches; speed, 14.65 knots. Her guns were not nearly as heavy as those of the *Inflexible*, but were capable of penetrating 13.35 inches of iron at 1,000 yards. She was provided with an upper-deck battery in two fixed towers. These two colossal engines of destruction did most of the work of battering down the defenses of Alexandria. The enormous range of their guns enabled them to carry on effec-



HER MAJESTY'S SHIP INFLEXIBLE.

carries four 80-ton guns. These enormous weapons have a length of 26 feet 9 inches and a caliber of 16 inches, and hurl a projectile of 1,700 pounds weight. The charge is 370 pounds of cubical or prismatic powder, and they are capable of penetrating 22 inches of iron at a distance of 1,000 yards. The turrets are arranged *en échelon*, instead of along the middle line, in order that the whole armament may be fired at once in the line of the keel as well as abeam. The turrets and guns are worked by Rendel's hydraulic system. The *Téméraire* is an iron and steel-clad vessel, with barbette

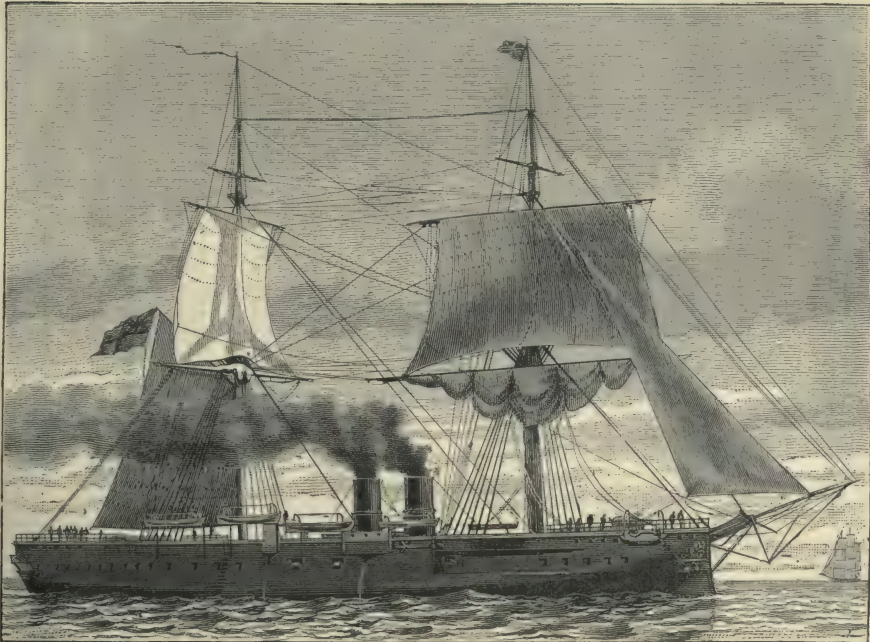
tive action at a distance of 3,000 to 5,000 yards, while they were entirely out of the reach of the projectiles from the forts. The rotating turrets of the one, and the revolving platforms of the other, also enabled them to bring their heavy guns to bear in different directions without a change of position. The strongest of the Egyptian works suffered little from the fire of the *Alexandra*, *Superb*, and *Sultan*, although engaged at a distance of only 800 yards, while they were speedily reduced when the *Inflexible* and *Téméraire* brought their guns to bear upon them. These guns, however, were of the



muzzle-loading class and were worked slowly. The armament of the forts, moreover, did not consist of the most effective kind of modern ordnance.

The British Admiralty has been engaged in providing several new vessels for the navy during the past year, and every effort is made to bring the latest improvements into use. Two vessels, which have been in course of construc-

	Calliope.	Canada.
Length between perpendiculars...	235 ft.	225 ft.
Extreme breadth.....	44 ft. 6 in.	44 ft. 6 in.
Draught of water.....	17 ft. 5 in.	17 ft.
	19 ft. 11 in.	18 ft. 6 in.
Indicated horse power.....	3,000	2,300
Speed in knots.....	13½	13
Coal stowage.....	320 tons.	270 tons.
Ship's company.....	250	245
Guns, 6-inch breech-loading rifles.	10	6



HER MAJESTY'S SHIP TÉMÉRAIRE.

tion at Chatham Dock-yards, belong to widely-different types. The Calliope, which was begun in October, 1881, is an unarmored corvette, belonging to what is known as class "C." These are not designed so much as fighting-ships as for patrols and escorts, and for service on foreign stations. They are of 2,383 tons displacement, 2,300 horse-power, and their dimensions are 225 feet between perpendiculars, 44 feet 6 inches extreme breadth, and 21 feet 6 inches depth of hold. The transverse frames are of iron, but the bulkhead and skin-plating of steel. They have steel shell-proof decks below the water-line and extending over the whole length of the engines, boilers, and magazines. They are fully rigged and coppered, and provided with large bunker capacity to fit them for long cruises. They are good sailers, and make a speed of 13 knots an hour under steam. The Calliope is intended to combine all the qualities calculated to give to this class of vessels the highest merit. As compared with the Canada, regarded as the best specimen previously floated, it has the following characteristics:

The Calliope is to be fitted with sponsons for 6-inch guns, projecting beyond the sides fore and aft, and with Whitehead torpedoes and machine guns. The other vessel which has been mentioned as under construction is the Impérieuse, an armor-clad, swift-sailing, fighting-ship. It is 315 feet long, 61 feet breadth, 25 feet draught, 7,390 tons displacement, and 8,000 horse-power. She is to carry four 18-ton guns, mounted in barbets, and six 6-inch guns on the broadside, capable of penetrating 12 inches of armor. Two of the barbets will be built across the middle line forward and aft, and the rest abreast of each other at the sides amidships. The heavy guns are situated at twice the height out of water that they are in the turret-ships, and they can be fired, three together, in any direction—ahead, astern, or on the beam. The armor on the sides of the citadel will be 10 inches thick, that across the ends 9 inches, that on the barbets 8 inches, while the armor protecting the pilot-tower will be 10 inches thick. The whole of the protection will consist of the new steel-faced armor. The pe-

culiar shape of the iron beams, which are to support the armored deck containing the coal armor, is what mainly distinguishes the Impé-rieuse from other ships in a similar state of progress. These are bent downward at the ends, so that the sloping contour of the deck at the sides will cause shots to glance off. Her bunkers will be able to store the extraordinary quantity of 1,200 tons of coal. She will be brig-rigged, and will carry a good spread of

canvas. Under steam her speed is expected to be 16 knots an hour.

Of the vessels lately completed in the English dock-yards, and not yet put into service, the most important are the double-turret ships Neptune, Dreadnaught, and Colossus.

The following table contains a list of the armored vessels of the British navy designed for active service, showing the class, displacement, draught, and maximum speed of each:

NAME.	Material.	Class.	Maximum indicated horse-power.	DISPLACEMENT AND DRAUGHT ON TRIAL.		Maximum speed.
				Displacement.	Maximum draught.	
Inflexible.....	Partly steel.....	Turret-ship.....	8,483	9,515	23 0	Knots.
Dreadnaught.....	Iron.....	".....	8,207	9,120	24 6	14 74
Thunderer.....	".....	".....	6,272	9,190	26 6	14 52
Devastation.....	".....	".....	6,652	9,190	26 6	18 49
Agamemnon.....	".....	".....	6,600	8,490	24 0	18 54
Ajax.....	".....	".....	6,600	8,490	24 0	a18 00
Monarch.....	".....	".....	7,842	8,070	25 9	a18 00
Neptune.....	".....	".....	7,993	9,170	25 3	14 21
Colossus.....	Steel.....	".....	6,000	9,250	26 3	14 93
Majestic.....	".....	".....	6,000	9,150	26 3	a14 00
Conqueror.....	".....	".....	a4,500	6,200	24 0	a14 00
Collingwood.....	Iron.....	Barbette-ship.....	a7,000	9,150	26 3	.....
Alexandra.....	".....	Broadside-ship.....	8,615	9,482	26 3	14 99
Téméraire.....	Steel and iron.....	Barbette-towers.....	7,516	8,571	27 4	14 05
Sultan.....	Iron.....	Broadside-ship.....	8,773	8,723	26 10	14 20
Hercules.....	".....	".....	8,529	8,676	26 3	14 09
Bellerophon.....	".....	".....	6,812	7,369	26 8	14 05
Swiftsure.....	".....	".....	4,832	6,537	25 7	18 70
Triumph.....	".....	".....	5,156	6,552	25 8	14 16
Audacious.....	".....	".....	4,021	6,170	23 0	12 82
Invincible.....	".....	".....	4,882	5,563	21 6	14 09
Iron Duke.....	".....	".....	4,789	5,568	21 6	18 85
Penelope.....	".....	".....	4,708	4,663	17 4	12 76
Superb.....	".....	".....	7,481	8,950	28 0	18 78
Shannon.....	Iron and steel with wood sheathing.....	Belted cruiser.....	8,370	5,890	28 4	12 85
Nelson.....	".....	".....	6,645	7,473	25 1	14 05
Northampton.....	".....	".....	6,073	7,652	25 3	18 17
Belleisle.....	Iron.....	Broadside-ship.....	8,200	4,783	19 5	12 20
Orion.....	".....	".....	2,329	5,070	26 10	11 44
Agincourt.....	".....	".....	5,917	10,230	26 6	18 73
Minotaur.....	".....	".....	6,702	10,280	26 10	14 41
Northumberland.....	".....	".....	6,558	10,543	27 9	14 13
Achilles.....	".....	".....	4,977	9,984	27 5	18 73
Warrior.....	".....	".....	5,267	9,231	27 8	14 07
Black Prince.....	".....	".....	6,772	9,300	27 8	18 60
Hector.....	".....	".....	8,256	6,455	25 8	12 86
Valiant.....	".....	".....	8,348	6,485	25 6	12 51
Resistance.....	".....	".....	2,329	6,300	26 11	11 40
Defense.....	".....	".....	2,343	6,077	26 1	11 23
Lord Warden.....	Wood.....	".....	6,706	7 38	27 9	13 49
Repulse.....	".....	".....	8,347	6,010	25 10	12 23
*Polyphemus.....	Steel.....	Torpedo and ram.....	a5,500	2,640	20 6	a17 00

a Estimated.

Besides these are the following, intended for harbor-defense:

NAME.	Material.	Class.	Maximum indicated horse-power.	DISPLACEMENT AND DRAUGHT ON TRIAL.		Maximum speed.
				Displacement.	Maximum draught.	
Glatton.....	Iron.....	Turret.....	2,803	3,500	19 3	Knots.
Hotspur.....	".....	Turret and ram.....	3,407	4,080	20 2	12 10
Rupert.....	".....	".....	4,035	5,152	22 10	12 65
Prince Albert.....	".....	Turret.....	2,121	3,800	20 0	18 59
Cyclops.....	".....	".....	1,660	3,100	15 5	11 26
Gorgon.....	".....	".....	1,669	3,311	16 0	11 02
Hecate.....	".....	".....	1,755	3,059	15 6	11 13
Hydra.....	".....	".....	1,472	3,144	15 8	10 59
Scorpion.....	".....	".....	1,455	2,660	16 4	11 20
Wivern.....	".....	".....	1,446	2,662	16 1	10 51
Viper.....	".....	".....	696	1,180	11 10	10 05
Vixen.....	Composite.....	Gunboat.....	658	1,189	11 11	9 53
Abyssinia.....	Iron.....	Turret.....	949	2,516	14 8	9 06
Magdala.....	".....	".....	1,486	2,997	14 8	9 59
Cerberus.....	".....	".....	1,369	2,920	14 2	10 06



Great Britain has also a large fleet of unarmored vessels of various classes, some of them quite swift and powerful. The following list is compiled from official reports of steam trials:

NAME.	Material.	Class.	Maximum indicated horse-power.	DISPLACEMENT AND DRAUGHT ON TRIAL.		Maximum speed.
				Displacement.	Draught.	
Shah.....	Iron sheathed with wood.	Frigate.....	7,477	5,922	Ft. In.	Knots.
Inconstant.....	" "	" "	7,361	5,828	25 7 $\frac{1}{2}$	16.45
Raleigh.....	" "	" "	5,541	5,285	24 7	16.51
Boadicea.....	Iron cased with wood	Corvette.....	5,292	3,883	25 2	15.15
Bacchante.....	" "	" "	2,490	8,681	22 4	14.59
Euryalus.....	" "	" "	5,109	4,223	22 0	12.07
Rover.....	" "	" "	4,964	3,462	22 6	14.71
Volage.....	" "	" "	4,500	3,080	22 7	14.53
Active.....	" "	" "	4,131	3,083	21 6	15.12
Iris.....	Steel.....	Dispatch.....	7,556	3,290	21 2 $\frac{1}{2}$	15.08
Mercury.....	" "	" "	7,534	3,290	20 6	18.58
Cleopatra.....	Steel and iron cased with wood.	Corvette.....	2,611	1,922	20 6	18.87
Carysfort.....	" "	" "	2,400	2,398	17 0	13.95
Champion.....	" "	" "	2,800	2,380	19 0	12.06
Comus.....	" "	" "	2,837	2,427	18 1 $\frac{1}{2}$	13.00
Conquest.....	" "	" "	2,674	1,930	19 3	12.79
Curacao.....	" "	" "	2,541	1,930	17 0	13.98
Constance.....	" "	" "	2,020	2,781	17 0	13.58
Cordella.....	" "	Twin screw corvette.....	2,020	2,781	20 9	12.30
Canada.....	" "	Corvette.....	2,300	2,380	18 6	13.00
Opal.....	" "	" "	2,300	2,380	18 6	13.00
Tourmaline.....	Composite.....	" "	2,187	2,098	19 0	12.53
Turquoise.....	" "	" "	1,972	2,119	18 10	12.62
Garnet.....	" "	" "	1,994	2,195	19 2	12.32
Emerald.....	" "	" "	2,005	1,973	18 2	13.20
Ruby.....	" "	" "	2,170	1,636	16 3	13.57
Pelican.....	" "	" "	1,833	2,126	18 10	12.28
Penguin.....	" "	Sloop of war.....	1,056	860	14 6	12.24
Phoenix.....	" "	" "	719	973	15 0	10.20
Cormorant.....	" "	" "	1,128	804	14 4	11.00
Pegasus.....	" "	" "	951	1,131	15 4	11.81
Kingfisher.....	" "	" "	972	1,131	15 10	11.47
Wild Swan.....	" "	" "	900	1,130	15 9	11.00
Miranda.....	" "	" "	797	1,094	15 6	10.35
Osprey.....	" "	" "	1,020	884	14 7	11.00
Mutine.....	" "	" "	946	980	15 0	11.35
Dragon.....	" "	" "	756	1,200	14 6	10.25
Gannet.....	" "	" "	1,006	1,142	15 3	11.52
Esplegle.....	" "	" "	1,107	1,150	15 10	11.53
Daring.....	" "	" "	900	1,137	15 9	11.00
Sappho.....	" "	" "	915	926	18 11	10.63
Flying-Fish.....	" "	" "	884	981	18 10	10.59
Egeria.....	" "	" "	836	925	14 1	10.95
Albatross.....	" "	" "	1,011	949	14 0	11.30
Fantome.....	" "	" "	838	918	14 0	10.51
			975	949	14 0	11.00

a Estimated.

THE FRENCH NAVY.—The French Government has been paying renewed attention to the building up of its naval strength, which has somewhat declined since 1870. Its efforts, indeed, began soon after the report of Admiral de Montaignac, in 1875, on the inefficient condition of the naval defenses. Since that time the dock-yards at Brest, Orléans, Lorient, and Toulon have been busy, but the navy has not yet attained the strength it had in 1867-'68, when the Marquis de Chasseloup-Laubat had brought it to the highest state of efficiency. At the beginning of this year it consisted of twenty-three ironclads of the first class (*bâtiments de combat*), ten of the second class, available only for defensive warfare, and six of the third class, or *gardes-côtes cuirassés*, for the defense of the seaboard. There were also 264 unarmored screw-steamers, 62 paddle-steamers, and 113 sailing-vessels. Many of these ships, however, were only effective on paper. Thus, of the unarmored screw-steamers, more than half were not on active service, being either

stripped of their guns or on the reserve list. Only two of the 29 ships-of-the-line of this class, the *Louis XIV*, 490 horse-power, with 116 guns, and the *Jean Bart*, 400 horse-power, with 66 guns, were afloat last year. Again, 16 out of the 23 first-class ironclads are of antiquated construction, with plates not exceeding 7 $\frac{1}{2}$  inches in thickness at the water-line, and most of them are to be withdrawn from the active list in 1885.

Six new ironclads of the first class, five of the second, and one of the third have been completed during the year, and six others of different sizes are in process of construction. Of these the two most remarkable are the *Formidable*, at Lorient, and the *Amiral Baudin*, at Brest, monster ironclads of 11,300 tons, and armored at the sides with plates of 18 to 25 inches thickness. The three most powerful of the completed ironclads of the French navy are the turret-ships *Dévastation* and *Foudroyante*, and the *Amiral Duperré*. They were designed nearly on the same lines, are 312

feet in length, and constructed mainly of steel. The first-named two have plates of 14 inches, and mount six guns each, that is, four of 38 tons and two of 25 tons; their indicated horse-power is 4,200, and their displacement 9,600 tons. The *Amiral Duperré* has 12-inch plates, and four 38-ton guns. Next in order come the six new ironclads, the *Tempête*, *Tonneur*, *Fulminant*, *Furieux*, *Vengeur*, and *Tonnant*, with 11½-inch plates, and two 38-ton guns apiece. In all of them horizontal steel armor is used of sufficient strength to make the decks bomb-proof, and the guns are mounted *en barbette*—i. e., on swivels, so as to be aimed in any direction. The horse-power of the first three new ships is 4,200, and the displacement 5,495 tons; in the remaining three the horse-power is 3,800, and the tonnage 4,452. Not much inferior to these nine first-class ironclads are the *Redoutable*, 8,658 tons, 6,000 horse-power, six guns, and 9-inch plates; and the *Trident*,

*Friedland*, and *Colbert*, which have all 8½-inch plates, are of 8,164 tons burden, and carry 10 guns apiece—viz., eight of 24 tons and two of 12 or 18 tons. The second-class ironclads, now fifteen in number, have all 6-inch plates. The newest carry four 12-ton guns, the older ones have four 7-ton guns and four of 5 tons. The tonnage of all the fifteen ships is the same, 3,445, but the horse-power varies between 3,963 in the new-built *Victorieuse* and 1,987 in the *Bayard*, *Duguesclin*, *Turenne*, and *Vauban*, also new-built. At the head of the seven coast-guard ironclads stands the *Indomptable*, of 600 tons, with 10-inch plates, and two 38-ton guns; the thickness of the armor-plates in the others varies between 9 inches and 5½ inches.

The following list, made up from the latest official sources, contains the names and description of all the armored vessels in actual service in the French navy:

NAME AND CLASS OF VESSEL.	Thickness of armor, in inches.	Displacement, in tons.	Maximum speed, in knots, per hour.	Armament: number and description of guns (all breech-loading rifles).	Remarks.
<b>SEA-GOING CRUISERS.</b>					
<i>Amiral Duperré</i> .....	24·6	10,322	14·5	14 13½-inch and 14 5½-inch.....	Iron and steel, ram, ship-rigged.
<i>Dévastation</i> .....	15	9,454	.....	4 12½-inch, 4 10½-inch, and 8 5½-inch.	" " " "
<i>Foudroyante</i> .....	15	9,454	.....	" " " "	" " " "
<i>Redoutable</i> .....	14	8,661	14	8 10½-inch and 6 5½-inch.....	" " " "
<i>Friedland</i> .....	8·66	8,684	14	8 10½-inch and 8 5½-inch.....	Iron ram, full sail-power.
<i>Richelleu</i> .....	8·66	8,651	13	6 10½-inch, 2 8½-inch, and 5 9½-inch..	" " " "
<i>Trident</i> .....	8·66	8,183	14·5	8 10½-inch, 4 5½-inch, and 2 9½-inch..	" " " "
<i>Colbert</i> .....	8·66	8,183	14	8 10½-inch, 6 5½-inch, and 1 9½-inch..	" " " "
<i>Amiral Baudin</i> .....	22	.....	.....	8 100-ton guns.....	Building.
<i>Formidable</i> .....	.....	.....	.....	do	" " " "
<i>Duguesclin</i> .....	10	5,789	14	4 9½-inch, 1 7½-inch, and 6 5½-inch..	Iron and steel, ram.
<i>Bayard</i> .....	.....	5,789	.....	" " " "	Full sail-power.
<i>Turenne</i> .....	.....	5,789	.....	" " " "	" " " "
<i>Vauban</i> .....	.....	5,789	.....	" " " "	" " " "
<i>Triomphante</i> .....	6	4,183	13	6 9½-inch, 3 7½-inch, and 6 5½-inch..	" " " "
<i>Victorieuse</i> .....	6	4,074	13	6 9½-inch, 1 7½-inch, and 6 5½-inch..	" " " "
<i>La Gallionnière</i> .....	6	4,058	13	6 9½-inch.....	" " " "
<i>Suffren</i> .....	7½	7,480	13	4 10½-inch and 4 9½-inch.....	Wood hull, ram, full sail-power.
<i>Océan</i> .....	7½	7,244	13	4 10½-inch and 4 7½-inch.....	" " " "
<i>Marengo</i> .....	7½	7,244	13	" " " "	" " " "
<i>Solférino</i> .....	4½	6,689	13	52 6½-inch.....	" " " "
<i>Flandre</i> .....	5·9	5,613	14	8 12-ton and 4 7-ton.....	" " " "
<i>Gauloise</i> .....	5·9	5,613	14	" " " "	" " " "
<i>Guyenne</i> .....	5·9	5,613	14	" " " "	" " " "
<i>Magnanime</i> .....	5·9	5,613	14	" " " "	" " " "
<i>Provence</i> .....	5·9	5,613	14	" " " "	" " " "
<i>Revanche</i> .....	5·9	5,613	14	" " " "	" " " "
<i>Savoie</i> .....	5·9	5,613	14	" " " "	" " " "
<i>Surveillante</i> .....	5·9	5,613	14	" " " "	" " " "
<i>Valeuruse</i> .....	5·9	5,613	14	" " " "	" " " "
<i>Gloire</i> .....	4½	5,442	13	86 6·3-inch.....	" " " "
<i>Héroïne</i> .....	5·9	5,613	14	8 12-ton and 4 7-ton.....	Iron hull, ram, full sail-power.
<i>Couronne</i> .....	4½	5,700	19	2 12-ton and 10 7-ton.....	" " " "
<i>Alma</i> .....	6	3,617	11·8	6 7-ton.....	Wooden hull, full sail-power.
<i>Armide</i> .....	6	3,617	11·8	" " " "	" " " "
<i>Atalante</i> .....	6	3,617	11·8	" " " "	" " " "
<i>Belliqueuse</i> .....	6	3,617	11·8	" " " "	" " " "
<i>Jeanne d'Arc</i> .....	6	3,617	11·8	" " " "	" " " "
<i>Montcalm</i> .....	6	3,617	11·8	" " " "	" " " "
<i>Reine Blanche</i> .....	6	3,617	11·8	" " " "	" " " "
<i>Thetis</i> .....	6	3,617	11·8	" " " "	" " " "
7 coast-defenders, 1st class.	18	5,492	14	2 12½-inch and 4 4½-inch.....	Iron and steel, three now built.
8 coast-defenders, 2d class..	11½	4,458	10	2 10½-inch and 4 4½-inch.....	Iron and steel.
5 coast-defenders, 3d class..	6 to 9	3,190	11·3	1 or 2 9½-inch.....	Single revolving turret.
		3,648	13		

The French navy also contains twenty-six unarmored cruisers of various sizes and models, from the 5,350-ton frigates *Duquesne* and *Tourville* to the old type of sailing-corvettes

of about 1,200 tons, and some sixty-five gun-boats, with ram bow, wooden hulls, and full sail-power. The general service fleet consists of 9 ships-of-the-line, 6 frigates, 21 sloops of



war, 11 gunboats, 42 transports, and a number of smaller vessels. The Duquesne and Tourville were launched in 1876, and each carries 27 guns and has a calculated speed of 17 knots. Among the 130 screw-steamers which are really available out of a paper total of 264, are 58 gunboats and 35 transports or troop-ships; among the 62 paddle-steamers are 11 frigates, 7 cutters, and 44 dispatch-boats. Of the 113 sailing-vessels, the greater number are employed as *garde-pêches* on the fisheries near the coasts of France. In addition to the ships above enumerated, the following are now

on the stocks: The Kaiman, at Toulon; the Terrible, at Brest; and the Requin, at Bordeaux. All these are armored and have fixed turrets, the guns being mounted on swivels. They are each of 7,168 tons displacement, and are protected at the water-line by compound armor 50 centimetres thick at the top and diminishing to 40 centimetres.

GERMAN NAVY.—No notable additions have been lately made to the strength of the German navy. It contains several moderately heavy armored vessels, equipped with Krupp guns. The following is a list of the armored ships :

NAME OF VESSEL.	Thickness of armor in inches.	Displacement, in tons.	Maximum speed per hour, in knots.	Armament: number and description of guns (Krupp).	Remarks.
Kaiser . . . . .	10	7,560	14·5	8 10½-inch and 1 8½-inch Krupp....	Ram bow, full sail-power.
Deutschland . . . . .	10	7,560	14·5	" " " "	" "
Sachsen . . . . .	10	7,185	14	6 10½-inch guns . . . . .	Ram bow.
Baiern . . . . .	10	7,185	14	1 36-ton and 4 18-ton . . . . .	" "
Württemberg . . . . .	10	7,185	14	" " " "	" "
Baden . . . . .	10	7,185	14	" " " "	" "
Preussen . . . . .	9·2	6,748	14	4 10½-inch, 2 6·7 inch, and 4 8-inch..	Turret-ship.
Friedrich der Grosse . . . . .	9·2	6,558	14	" " " "	" "
König Wilhelm . . . . .	8	9,602	14·7	18 9½-inch and 5 8½-inch guns . . . . .	Broadside-ship, full sail-power.
Prinz Friedrich Karl . . . . .	5	5,819	18·5	16 8½-inch guns . . . . .	" "
Kronprinz . . . . .	5	5,398	14·8	" " " "	" "
Hansa . . . . .	6·2	8,497	12	6 8½-inch guns . . . . .	Corvette, full sail-power.
Arminius . . . . .	4·5	1,558	10·5	4 8½-inch guns . . . . .	Coast defender.
Prinz Adalbert . . . . .	4·7	1,456	9·5	1 8½-inch gun and 2 6·7 inch guns..	" "
Chamäleon . . . . .	8	1,000	9	1 36-ton (12 inch) gun . . . . .	" "
Wespe . . . . .	8	1,000	9	" " " "	" "
Viper . . . . .	8	1,000	9	" " " "	" "
Mücke . . . . .	8	1,000	9	" " " "	" "
Biene . . . . .	8	1,000	9	" " " "	" "
Scorpion . . . . .	8	1,000	9	" " " "	" "
Basilisk . . . . .	8	1,000	9	" " " "	" "
H. J. K. and L. . . . .	8	1,000	9	" " " "	" "

The unarmored vessels of the German navy are named in the list which follows, besides

which there is a general service fleet of 26 corvettes and gunboats :

MODERN UNARMORED SHIPS OF GERMANY.

NAME OF VESSEL.	Displacement, in tons.	Maximum speed per hour, in knots.	Armament: number and description of guns (Krupp).	Remarks.
Leipzig .....	3,863	14	12 6-7-inch guns .....	Iron corvette, double deck, full sail-power.
Sedan .....	3,808	14	.. .. ..	" "
Bismarck .....	2,400	15	16 6-7-inch guns .....	" "
Blücher .....	2,400	15	.. .. ..	" "
Stosch .....	2,460	15	.. .. ..	" "
Moltke .....	2,460	15	.. .. ..	" "
Graisenau and Stein .....	2,556	..	.. .. ..	Building.
Hohenzollern .....	1,697	16	.. .. ..	Iron, dispatch vessel.
B and C .....	..	..	.. .. ..	Building.
Kyklop .....	412	8	4 guns .....	Gunboat.
Otler .....	129	8	8 guns .....	"
Walf .....	470	..	4 guns .....	"
Hyäne and Iltis .....	470	..	.. .. ..	Building.
Six vessels now building .....	2,169	..	.. .. ..	Single-decked corvette, full sail-power.

**NAVY OF ITALY.**—Italy has two of the heaviest armored war-ships afloat, in the *Duilio* and *Dandolo*, which have each a displacement of 10,401 tons and over 21½ inches of armor. They each carry four 100-ton guns and have a maximum speed of 15 knots an hour. The two vessels cost about \$7,000,000. Two others of still greater dimensions, the *Italia* and the

Lepanto, are in course of construction. In the construction of the Duilio and the Dandolo, which were double-screw turret-ships of the Monitor type, each carrying four 100-ton guns of Sir William Armstrong's manufacture, mounted in two turrets, the Italian navy considerably surpassed anything yet supplied to the Royal Navy of Great Britain. But the



HIS ITALIAN MAJESTY'S SHIP LEPANTO.

Italy and the Lepanto, apparently, are very much more formidable, their dimensions being as follow: Length, 122 metres (or 403 feet); greatest breadth, not reckoning the armor, 22 metres 28 centimetres (73.11 feet); height at the middle section, 15 metres 20 centimetres (49 feet 5 inches); medium depth of immersion, 8 metres 48 centimetres (27.81 feet); tonnage, about 15,000. The Lepanto will have four 100-ton guns in a central armored redoubt, and eighteen  $4\frac{1}{2}$ -ton guns in the battery. There are two screws, each moved by two engines and three cylinders on the Penn system, twenty-six boilers, and six funnels. The indicated horse-power is 18,000; the expected speed is seventeen miles. There are only two masts, which serve for signaling. Side-armor being altogether abolished, the system of de-

fense consists in the cellular deck of the first battery, the armor of the main deck, the iron casing of the funnels and passages for projectiles, and the armor of the redoubt containing the four cannon. The Lepanto is 22 metres (72.16 feet) longer than the Duilio and Dandolo, and will have 4,000 more tonnage, about 8,000 extra horse-power, and a covered battery of eighteen cannon, which the above-named ships have not. The Lepanto will therefore be much more powerful. As much as possible, she will preserve the type of a frigate, differing here also from the Dandolo and Duilio. She will cost about twenty-four million francs. The time fixed for launching her is March 17, 1883. The following is a list and description of the other armored vessels of the Italian navy:

NAME.	Armor in inches.	Displacement, in tons.	Speed.	Armament.	Remarks.
Principe Amadeo. ....	6	5,780	..	1 23-ton and 6 18-ton guns.....	Wooden hull, line of battle cruiser, full sail-power.
Palestro .....	6	5,780	10	" "	"
Roma .....	6	5,697	..	6 18-ton and 2 12-ton guns.....	"
Venezia .....	6	5,697	..	" "	"
Castelfidardo.....	$4\frac{1}{2}$	4,194	13	9 9-ton and 2 12-ton guns.....	Full sail-power.
San Martino .....	$4\frac{1}{2}$	4,194	13	" "	"
Maria Pia.....	$4\frac{1}{2}$	4,194	13	" "	"
Ancona.....	$4\frac{1}{2}$	4,194	13	" "	"
Affondatore .....	5	4,070	..	2 12-ton guns .....	Coast defender, full sail-power.
Conte Verde .....	$4\frac{1}{2}$	3,982	..	6 12-ton guns and 1 9-ton gun....	Full sail-power.
Vareso .....	$4\frac{1}{2}$	2,700	10	4 9-ton guns .....	"
Terribile.....	$4\frac{1}{2}$	2,700	10	30 $6\frac{1}{2}$ -ton guns .....	"
Formidabile.....	$4\frac{1}{2}$	2,700	10	" .....	"

In the construction of the Lepanto, the object was to make a ship sufficiently powerful for offensive as well as defensive operations, and possessing greater speed than any other vessel.

Italy has an unarmored fleet of 3 frigates, 7

corvettes, 20 gunboats, 10 dispatch-vessels, 7 screw-transports, and a number of smaller vessels.

NAVY OF SPAIN.—The armored ships of the Spanish navy are included in the following list:



NAME OF VESSEL.	Thickness of armor, in inches.	Displacement, in tons.	Maximum speed per hour, in knots.	Armament: number and description of guns (all rifled).	Remarks.
Numancia.....	5	7,053	13	6 18-ton, 3 9-ton, and 16 7-ton.....	Broadside battery, ram bow, ship-rigged.
Vittoria.....	5½	7,000	..	4 12-ton, 3 9-ton, and 12 7-ton.....	Full sail-power.
Saragossa.....	4½	.....	..	4 11-inch, 2 8½-inch, and 14 7½-inch..	"
Arapiles.....	4½	.....	..	2 18-ton, 5 9-ton, and 10 7-ton.....	"
Mendez Nuñez.....	..	.....	..	4 9-inch and 2 8-inch.....	"
Sagunto.....	6	6,300	..	2 18-ton, 5 9-ton, and 10 7-ton.....	"
Aragon.....	8½	3,650	..	8 guns.....	Being built.
Castilla.....	8½	3,650	..	".....	"
Navarra.....	8½	3,650	..	".....	"
Duque de Tetuan.....	4	600	..	1 6½-inch and 4 4½-inch.....	"
Puigserda.....	4	515	..	1 6½-inch and 2 4½-inch.....	Monitor.

Spain has a small unarmored fleet of large-size vessels, but many small gunboats for the defense of her colonies—in all, 9 frigates, 20 corvettes, and 75 gunboats.

NAVY OF RUSSIA.—The Russian navy contains 29 armored and 10 unarmored ships, besides a general service fleet of 2 frigates, 18 corvettes, and 56 gunboats. The unarmored

vessels include four American-built ships, the Europe, 3,000 tons, the Asia, 2,650, the Africa, 2,580, and the Zabiaca, 1,200 tons, armed with four and six inch guns and making a speed under full sail-power of 12 to 14 knots. The remainder are Russian-built cruisers of 1,334 tons. The following is a list of the armored vessels of Russia:

NAME OF VESSEL.	Thickness of armor, in inches.	Displacement, in tons.	Armament.	Remarks.
Peter the Great.....	14	9,510	4 12-inch 40-ton guns.....	Full sail-power.
Knaz Minin.....	12	8,800	4 11-inch 28-ton guns.....	
Duke of Edinburgh.....	6	4,438	4 8-inch 26-ton guns.....	
General Admiral.....	6	4,438	".....	
Sevastopol.....	4½	6,200	16 8-inch 9-ton guns.....	Wooden hull, ram bow, full sail-power.
Petropaulovskl.....	4½	6,200	20 8-inch 9-ton guns.....	
Knaz Poljarski.....	4½	4,500	10 8-inch 9-ton guns.....	
Admiral Lazareff.....	5½ to 6	3,700	6 9-inch 14½-ton guns.....	
Admiral Grulig.....	5½ to 6	3,700	8 11-inch 27½-ton guns.....	Full sail-power.
Admiral Tchitchagoff.....	6	3,700	2 11-inch 27½-ton guns.....	
Admiral Spindadoff.....	6	3,700	".....	
Pervenez.....	4½	3,300	26 8-inch guns.....	
No-tron-meña.....	4½	3,300	16 8-inch guns.....	Single-turret monitor.
Kreml.....	6	3,300	26 8-inch guns.....	
Auragan.....	4½	1,555	2 9-inch 14½-ton guns.....	
Tiphon.....	4½	1,555	".....	
Latnik.....	4½	1,555	".....	Double-turret monitor.
Lava.....	4½	1,555	".....	
Vetchoun.....	4½	1,555	".....	
Kaldoun.....	4½	1,555	".....	
Streletz.....	4½	1,555	".....	Circular monitor.
Edenorag.....	4½	1,555	".....	
Bronenosetz.....	4½	1,555	".....	
Pern.....	4½	1,555	".....	
Smerch.....	4½	1,330	4 9-inch 14½-ton guns.....	Double-turret monitor.
Tchavargelika.....	5	1,335	4 11-inch 27½-ton guns.....	
Rousalka.....	5	1,335	2 11-inch 27½-ton guns.....	
Norvgorod.....	11	2,490	".....	
Vice-Admiral Popoff.....	18	3,550	2 12-inch 40-ton guns.....	"

The fastest of these are capable of making 13 knots an hour, and the speed of the lighter class is 6 to 7 knots.

NAVY OF AUSTRIA.—Austria has a navy of fair power, as appears from the following list of her armored ships of war:

NAME OF VESSEL.	Thickness of armor, in inches.	Tons displacement.	Speed, in knots, per hour.	Armament.	Remarks.
Tegethoff.....	14-5	7,390	14	6 11-inch Krupp.....	Line-of-battle cruiser, bark-rigged.
Custoza.....	9½	7,060	14	8 10-inch Krupp.....	Line-of-battle cruiser, ship-rigged.
Lissa.....	6½	6,050	13	12 9½-inch Krupp.....	" " " "
Erzherzog Albrecht.....	8-3	5,940	13	8 10-inch Krupp.....	" " " "
Kaiser.....	6½	5,810	12	10 9-inch Armstrong.....	" " " "
Don Juan d'Austria.....	4½	3,550	8-5	12 7-inch Armstrong.....	Line-of-battle cruiser, ram, ship-rigged.
Kaiser Max.....	4½	3,550	8-5	".....	" " " "
Prinz Eugen.....	4½	3,550	8-5	".....	" " " "
Erzherzog Ferdinand Max.....	5	5,140	10-3	14 8-27-inch Krupp.....	Line-of-battle cruiser, ship-rigged.
Habsburg.....	5	5,140	10-3	".....	" " " "
Salzmander.....	4½	3,110	7	10 7-inch Armstrong.....	Ordinary station service, ship-rigged.
Maros.....	1-5	310	5-6	2 5-9-inch Krupp.....	River monitor.
Leitha.....	1-5	310	5-6	".....	"

NAVY OF TURKEY.—Turkey has 15 armored vessels besides 1 ironclad monitor and 8 river gunboats, and an unarmored fleet of 1 ship-of-

the-line, 5 frigates, 7 corvettes, 14 gunboats, and 44 transports and smaller vessels. The following is a list of the armored ships:

NAME OF VESSEL.	Thickness of armor, in inches.	Displacement, in tons.	Maximum speed, in knots, per hour.	Armament: number and description of guns (all rifled).	Remarks.
Mesoodiyeh.....	12	8,994	18 7/4	12 18-ton and 8 6½-ton guns.	Ram bow, ship-rigged.
Noosretiyeh.....	10	7,900	13	10 12-ton and 2 6½-ton guns.	" " " "
Aziiziyeh.....	5½	6,400	12	1 12-ton and 15 6½-ton guns.	Ram bow, bark-rigged.
Osmaniyeh.....	5½	6,400	12	" " " "	" " " "
Orkaniyeh.....	5½	6,400	12	" " " "	" " " "
Marmondiyeh.....	5½	6,400	12	" " " "	" " " "
Assar-i-tevrik.....	8	5,687	12	8 12-ton guns.	Full sail-power.
Peth-i-Bulend.....	9	2,719	14	4 12-ton guns.	" " " "
Mookademî Khân.....	9	2,719	14	" " " "	" " " "
Avni ilah.....	6	2,314	12	" " " "	Ram bow, full sail-power.
Mooyini Zâfir.....	8	2,314	13	" " " "	" " " "
Idjalliyeh.....	.....	2,300	11	2 12-ton and 2 6½-ton guns.	Full sail-power.
Nedj-im-shefket.....	.....	2,300	11 5	5 9-ton guns.	" " " "
Assar-i-shefket.....	.....	2,300	11	" " " "	" " " "
Haiz-i-Rahman.....	1½	2,300	12	2 9-ton and 2 4-ton guns.	" " " "

NAVY OF HOLLAND.—The Dutch navy contains 20 armored ships of war ranging from 1,500 to 5,200 tons displacement, besides six lighter ironclad rams and gunboats, and an unarmored fleet of 1 frigate, 31 corvettes, 31

small gunboats, 13 side-wheel steamers, and 16 torpedo-boats. The following is a list and description of the heavier armored vessels of Holland; the unarmored fleet is composed of vessels of her former navy:

NAME OF VESSEL.	Thickness of armor, in inches.	Displacement, in tons.	Armament.	Remarks.
Koning der Nederlanden.....	8	5,201	4 11-inch Armstrong and 4 4½-inch Krupp guns.	Ram bow for general service.
Prins Hendrik der Nederlanden.....	4½	3,822	4 9-inch Armstrong.	" " " "
Guinea.....	6	2,340	2 9-inch Armstrong.	Ram bow for coast-defense.
Buffel.....	8	2,163	" " " "	" " " "
Schorpioen.....	8	2,141	" " " "	" " " "
Ster.....	6	2,036	" " " "	" " " "
Cerberus.....	5½	1,506	" " " "	" " " "
Bloedhond.....	5½	1,506	" " " "	" " " "
Heiligerlee.....	5½	1,506	" " " "	" " " "
Krokodil.....	5½	1,506	" " " "	" " " "
Tijger.....	5½	1,392	" " " "	" " " "
Adder.....	5½	1,541	" " " "	" " " "
Haal.....	5½	1,541	" " " "	" " " "
Hyena.....	5½	1,541	" " " "	" " " "
Panther.....	5½	1,541	" " " "	" " " "
Wesp.....	5½	1,541	" " " "	" " " "

The speed of those of 2,000 tons and upward is about 12 knots an hour, and of the lighter vessels about 8 knots.

armored vessels and an unarmored fleet of 3 frigates, 9 corvettes, and 12 gunboats, which is sufficient for immediate defense. The armored ships are the following:

NAVY OF DENMARK.—Denmark possesses 7

NAME.	Thickness of armor, in inches.	Displacement, in tons.	Armament.	Remarks.
Helgoland.....	12	5,265	1 12-inch, 4 10½-inch, and 5 5-inch guns.	Broadside, full sail-power.
Odin.....	8	3,086	4 10-inch guns.	Frigate, full sail-power.
Denmark.....	4½	4,664	12 8-inch and 12 6-inch guns.	" " " "
Peder Skram.....	4½	3,321	6 8-inch and 12 6-inch guns.	" " " "
Gorm.....	8	2,308	2 10-inch guns.	Corvette, full sail-power.
Lendernen.....	5½	2,044	2 9-inch guns.	" " " "
Rolfé Krake.....	4½	1,323	3 8-inch guns.	" " " "

CONSTRUCTION OF GUNS: ENGLISH METHOD.—There has been for some years an almost continuous revolution going on in the construction of heavy ordnance to be used on board ships of war. It is now generally acknowledged that the most effective type of gun for fleets

and forts is a breech-loading rifled cannon of steel, firing projectiles of moderate size with great velocity. Twenty-five years ago the prevailing type was the muzzle-loading, smooth-bore, cast-iron weapon of enormous caliber. The largest of these attained a diameter of bore



of twenty inches or more. England began arming her fleets and fortresses with rifled cannon in 1858. A system of breech-loading was adopted at the same time, but so many accidents occurred in the working of the guns that the system fell into disfavor with the navy, and, after a long investigation and competitive trials, both the War Office and Admiralty determined to return to muzzle-loading ordnance. That system has continued to prevail until within a year or two; but another change of opinion has taken place, and it is generally admitted that there must be a rearmament of the British navy and forts with breech-loaders. The great steel-clad vessels of the present English fleet are armed with muzzle-loaders, some of which have great power: the 80-ton guns of the *Inflexible* have a caliber of sixteen inches, carry a projectile of 1,700 pounds, with a powder-charge of 370 pounds, and will penetrate 27.5 inches of iron at 500 yards. The muzzle velocity is 1,520 feet per second, and the muzzle energy 27,213 foot-tons—that is, the equivalent of 27,213 tons of metal falling one foot. The 25-ton guns, such as are carried by the *Téméraire*, the *Monarch*, and the *Alexandra*, have a twelve-inch caliber, 600-pound projectile, 85 pounds powder-charge, and penetrate 13.9 inches of iron at 500 yards. Their muzzle velocity is 1,180 feet per second, energy 7,030 foot-tons. The 18-ton guns forming part of the armament of the leading vessels of the fleet have 10-inch caliber, 400-pound projectiles, 70 pounds charge, penetrate 12.7 inches at 500 yards, have muzzle velocity of 1,364 feet per second, and energy of 5,160 foot-tons. The 12-ton guns are 9-inch caliber, 250-pound projectile, 50 pounds charge, 10.4-inch penetrating power, 1,420 feet per second muzzle velocity, and 3,496 foot-tons muzzle energy. The most common gun of all, the chief armament of cruisers, is the 6½-ton rifled cannon with a 7-inch bore, 115-pound projectile, 30 pounds charge, capable of penetrating 7.7 inches of iron at 500 yards, with a muzzle velocity of 1,525 feet per second, and energy of 1,246 foot-tons. These all load at the muzzle.

**GERMAN ORDNANCE.**—Germany adopted breech-loading ordnance at about the same time with Great Britain, but, instead of abandoning it after trial, endeavored so to improve its construction as to avoid the defects which caused disaster to the guns. The German system has been adopted by Russia, Austria, Denmark, and Holland. The present Krupp gun is breech-loading and consists of a steel body strengthened by hoops. The largest class has a twelve-inch caliber, and is bound with three tiers of hoops. Its projectile weighs 715 pounds, its powder-charge is 158 pounds, and it develops a working effect of 12,584 foot-tons. The French have a type of breech-loaders of their own, which have been adopted by Spain and Sweden. The largest of these have a caliber of 32 centimetres (12.6 inches), and throw a shot of 770 pounds with 132 pounds of powder,

developing an energy of 10,390 foot-tons. The prevailing manner of construction is to cut off the base of the breech from an iron body, insert a steel lining as far as the trunnions, and shrink hoops of steel around the exterior; but experiments with all-steel guns have been going on for some time.

**ITALIAN ORDNANCE.**—The standard naval ordnance of Italy is the Armstrong muzzle-loader, though there are some batteries of French breech-loaders. The newly ordered 100-ton guns are to be breech-loading, with the Armstrong mechanism for closing the breech. These are the largest afloat, being 32 feet long, having a caliber of 17 inches, and weighing 222,800 pounds each. The projectile is of steel, weighing 2,000 pounds, and is driven by a charge of 471 pounds of powder, with a velocity of 1,584 feet per second, and a working effect of 34,550 foot-tons.

**TENDENCY OF CONSTRUCTION.**—The tendency of construction is clearly toward steel guns of great length, rifled bore, of moderate caliber, using large charges of slowly-burning powder, and loading at the breech. Various devices have been tried to re-enforce the metal used, in such a way as to counteract its defective tendencies. Certain degrees of cohesive strength, elasticity under violent strain, and ductility, to prevent rupture, are desirable. As no limits are assignable to the force which it is desirable to impart to a projectile, it is impossible to define any bounds for the caliber and strength demanded in artillery. The problem is, therefore, the production and selection of a material combining in due proportions and in the highest degree cohesive strength, elastic extensibility, and ductility and malleability. No one of these properties is found in the highest degree in any metal possessing either of the two others in an equally high degree, and as yet no fixed relation is known between them. Of all the metals available for gun-construction, some of the varieties of steel, especially the low steel, combine the qualities desired in the greatest degree. These metals have been combined, and the strains have been sought to be overcome, first, by the method of initial tension, which is effected by shrinking heated iron bands around the parts in danger from pressure, as in the Woolwich system, or by slipping a tube into the bore after it has been enlarged by heat, as in the Palliser system, and, second, by the method of varying elasticity, which places the metal that stretches the most within its elastic limit around the surface of the bore, so that by its enlargement the explosive strain is transmitted to other parts. Among the methods of re-enforcement which appear to be growing in favor is that of winding the body of the gun with steel wire, in spirals of considerable obliquity, alternate layers running in opposite directions, and solidifying with a more fusible metal used as a solder. The walls of the bore may be the mandrel around which the wire is woven, then the

fused metal is poured in, and, after cooling, the gun is shaped, rifled, and finished. Armstrong obtained the following results with his wire gun: Caliber, 10.236 inches; weight, 21.5 tons; projectile, 500 pounds; charge of powder, 300 pounds; pressure in chamber, 18.6 tons. The relation between the charge and the projectile is here enormous, the former being over one half the latter.

**THREE TYPES OF GUNS.**—Authorities on improved ordnance are advocating three types of guns, all, however, being steel breech-loaders. For armor-piercing, it is said, a long, pointed bolt, nearly solid, is required, which must strike with great velocity, and must, therefore, be propelled by a very large charge of powder. Hence, an armor-piercing gun should have a large chamber and a comparatively small bore of great length. For pieces intended for breaching fortifications, on the other hand, no enlarged powder-chamber is wanted, but the shell must be made to hold the most powder for a given weight, and therefore must be rather short and thick. Hence the bore of the gun must be large, and need not be long, as little velocity is required. For producing destructive effects among troops a third kind of projectile should be employed—namely, shrapnel. For the effective discharge of this missile a large powder-charge is necessary, while, as the shell has to hold as many bullets as possible, the bore must be large enough to contain a short projectile of the given weight. Thus the proportions of the shrapnel-gun were intermediate between those of the armor-piercing gun and of the shell-gun.

**EXPERIMENTS AT SPEZIA.**—Some very interesting experiments were made at Spezia, Italy, in the latter part of November, for the purpose of testing the resistance of armor-plates, and the perforating or crushing power of heavy ordnance. The primary object was to ascertain by competitive trial the comparative merits of the compound plates of Cammell & Co. and Brown & Co., of Sheffield, England, and the all-steel plates of Schneider & Co., of Creusot, with a view to providing the most effective armor for the monster ships, the *Italia* and the *Lepanto*. The scene of the trial was the polygon of Muzziano, at Spezia, where similar experiments took place in 1876. On that occasion the Creusot establishment had carried off the palm, and the Duilio and Dandolo had in consequence been armored with Schneider plates; but the English manufacturers proceeded to make improvements in their plates by covering an iron backing with a face of steel. It was claimed for these compound plates that they were superior to those made wholly of steel. But the Messrs. Schneider had also made improvements in their work, and before ordering the armor for its new vessels the Italian Government determined to make a new trial at Spezia.

The cut on page 579 represents the gun in position as used at the experiments at Spezia. It

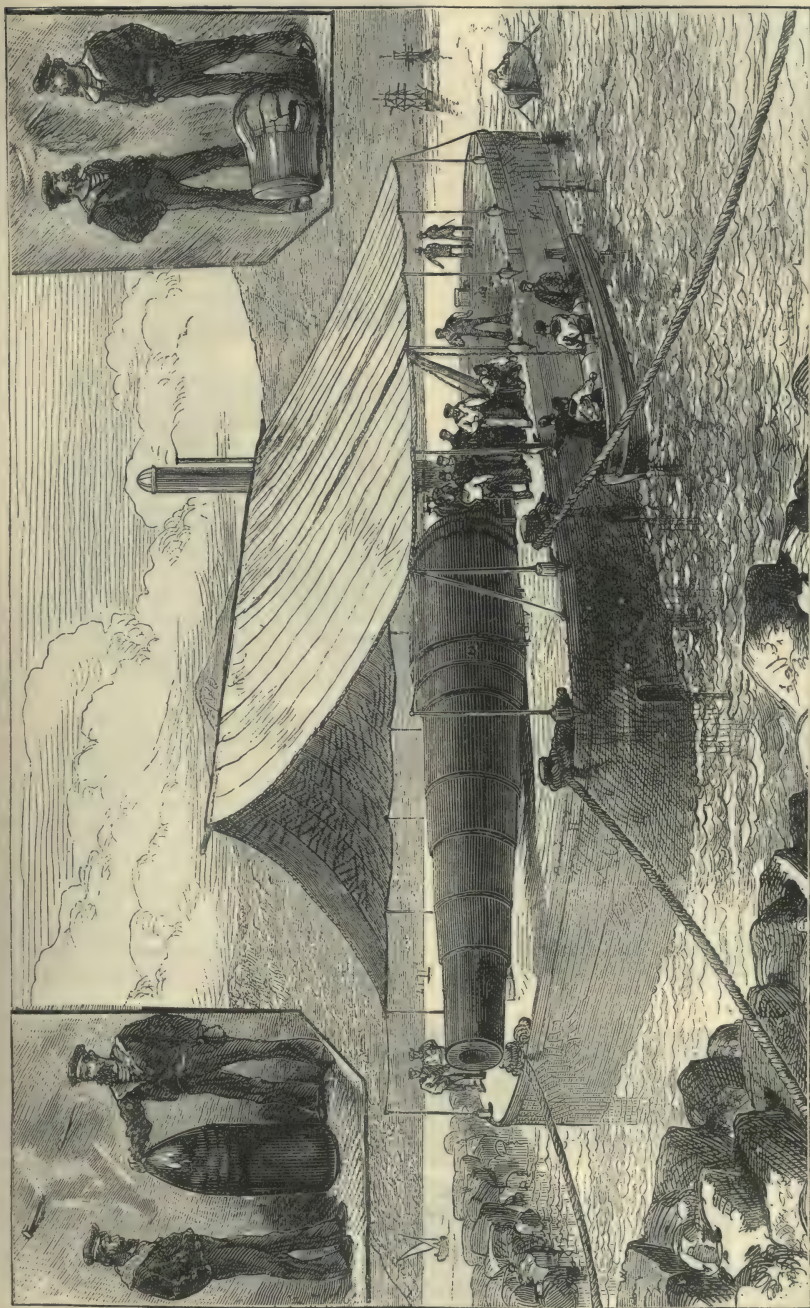
is not mounted in a turret, but on a pontoon built for the purpose. It was loaded and worked, however, by the mechanism to be used in the turret described further on, and precisely as it will be on board ship.

In the left-hand corner is represented the missile before the first shot at the Schneider plate. In the right-hand corner is represented the same missile after the shot.

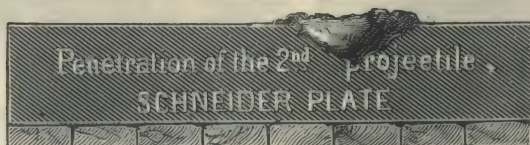
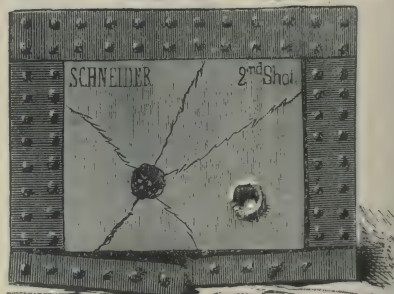
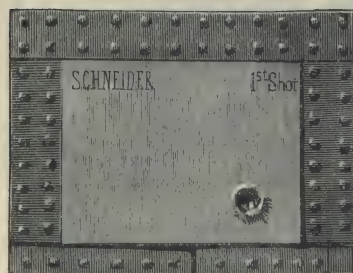
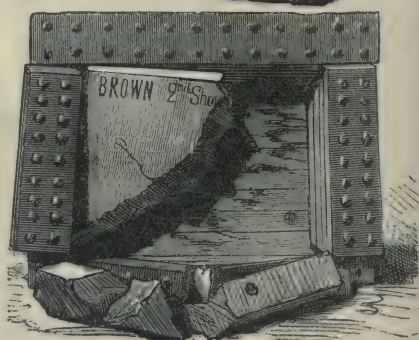
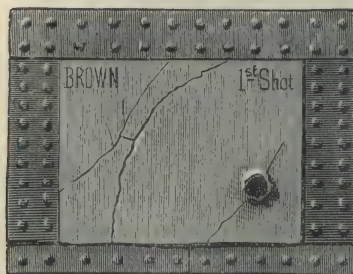
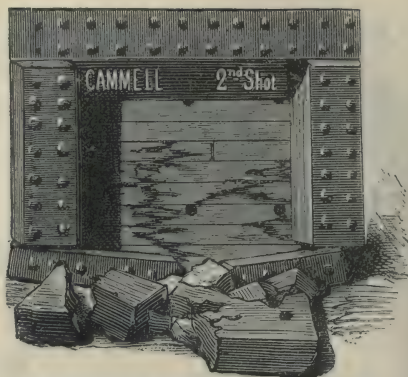
The cut on page 580 represents the three targets after the first and second fire at Spezia.

The Cammell, the Brown, and the Schneider plates, each 11 feet long, 8½ feet broad, and 19 inches thick, and weighing about 32 tons, were severally bolted, according to the methods of the competing manufacturers, to a heavy backing of oak and old metallic targets. These were set up at a distance of a little less than 100 yards from a 100-ton muzzle-loading Armstrong gun, which was anchored in a huge float off the shore. Two shots were fired at each plate, the first with a charge just sufficient to perforate 19 inches of iron, and the second with a charge capable of perforating 24 inches of iron. These were respectively 328 and 478 pounds of Fossano powder. The projectiles used were from the San Vito Arsenal, and were of pig-iron from the Gregorini foundry, weighing 2,003 pounds each. The caliber of the Armstrong gun used was little less than 18 inches. The striking velocity of the shot in the first test was 1,220 feet per second, and the total energy 20,000 foot-tons. In the second test the striking velocity was 1,560 feet, and the total energy 33,900 foot-tons. At the first shot both the English plates were badly cracked. The projectile penetrated the Brown plate 14 inches, and broke off. The Cammell plate was penetrated six inches. In both there were numerous cracks, some of which extended clear through, while the backing was badly wrenched, and the frames and bolts broken. The Schneider plate was penetrated eight inches, but was left absolutely without a crack, and its frame and backing were intact. At the second shot both the English plates were shattered to fragments, which fell at the foot of the target, leaving the backing bare and badly shattered. Of the Cammell plate this was literally true, and only a single piece of the Brown plate was left clinging to the target by a broken bolt. The Schneider plate was penetrated nine inches, or less than half its thickness. It received a few insignificant cracks, but the backing was uninjured, and not a bolt was broken. The projectile itself was badly shattered. The Government commission, as a result of the experiment, awarded the palm of superiority to the Schneider plate, which was then subjected to a crucial test. It was attacked at point-blank range with the same high powder-charge, and great velocity used in the second competitive trial, and with the hardest projectiles made. The striking velocity in this case was 1,538 feet per second, and the total energy





THE ONE-HUNDRED-TON GUN USED AT SPEZIA.



THE TARGETS USED AT SPEZIA.



34,000 foot-tons. Two shots were fired, the first with the Whitworth compressed-steel projectile, and the second with the Gregorini cast-steel. The former penetrated the plate only 8 inches, and was itself shortened 16 inches, bulging out in spherical form; the latter penetrated 13 inches, and then broke off, being also badly blunted. The result of these experiments was to turn the scale, for the time at least, in favor of the resisting power of armor-plates, as against the penetrating force of ordnance.

**HANDLING THE GUN.**—On the following day, at Spezia, there was another important and interesting series of experiments in the trial of the new Armstrong breech loading 100-ton guns intended for the Italia and Lepanto. This monstrous piece of ordnance is composed for more than half its weight of steel, the rest being wrought-iron. The inner tube and the nest tube which embraces it are both of steel, and on the exterior of the gun are rings of the same material. Its principal dimensions are as follow: Length over all, 468 inches; length of bore (26 calibers), 442 inches; length of rifling, 335·4 inches; diameter at muzzle, 33·3 inches; diameter at breech, 65·5 inches; diameter of bore, 17 inches; diameter of powder-chamber, 19·5 inches. One of the most interesting points with regard to the gun is the method of mounting it. The usual trunnions are entirely absent. The gun lies imbedded on a sort of sledge-carriage, which is a mass of steel weighing about fourteen tons. Projecting rings, which form part of the gun, rest in grooves, and prevent any backward or forward motion of the piece on the carriage, and rotatory motion is prevented by strong steel straps. Thus the gun and carriage are securely bound together, having their axes parallel, and recoil together in the same direction. The carriage rests and slides upon the planed surface of two cast-steel beams of about ten tons weight each. They are held together by the recoil-press, and their front ends pivot vertically on a massive hinge. Thus the axes of the gun, the carriage, the recoil-press, and the slide are all parallel, whatever the elevation, and the difficulty of restraining the rotatory motion caused in other systems by recoil is completely got rid of. The whole weight is taken by two powerful hydraulic presses, which work always together, being acted upon by one common supply-pipe. If the muzzle of the gun is to be elevated, the hydraulic rams sink, and the slide, pivoting on its front end, is lowered in rear, carrying with it recoil-press, gun, and carriage. The reverse takes place when the gun is to be depressed. By this simple arrangement a host of difficulties are at once eliminated, and some terrible strains removed from the system. And not only is there the advantage of harmonious recoil, but the pivoting on the end of the slide enables the gun to be fired through a very small port, which it would fill almost completely. The loading arrangements are also

extremely simple, and present some features of novelty. With the exception of bringing up the ammunition and ramming, which are performed by another hydraulic apparatus, the whole business of opening and closing the breech is performed by two levers close together, which are worked by one man. He can not make a mistake, for nothing can be moved out of its proper order, and, whatever position a lever may be in at the end of its last movement, the next act is performed merely by pushing or pulling the lever to the opposite side. One pair of levers works the whole breech-closing apparatus, prepares the gun for loading, or opens the breech after discharge. Another pair of levers runs the gun out and in, and elevates or depresses it. It is impossible to run it back or forward too far, and the whole mighty mass of metal may be managed by the hand of a lady, who can not possibly make a mistake. All the movements involved in opening the breech, withdrawing the breech-screw, replacing and closing the breech, can be performed in less than one minute. No damage can be done in the heat of action, and the gun can not be fired till the operation of loading and closing the breech has been completely performed.

The motive power in the processes of loading and laying the gun is hydraulic pressure, the mechanism for which is not attached to the gun itself. The hydraulic pumps are worked by a small steam-engine, which is governed in its rate of work by the pressure of water produced. It never ceases work, but, when no movement is required of any of the parts, its action is feeble, and only keeps up a certain normal pressure. But if any motion of the system is required and the touch of a lever opens the way for water to create that motion, the engine instantly sets off briskly and continues to act till the cessation of movement tells it that its services are no longer required. It then drops back at once to its slow and feeble action. The engine is seated on a tank, from which the pumps draw their water, and to which the water is returned after being exhausted from the various cylinders and pipes. Behind and across the breech of the gun, but entirely separate from it, is a slide-bed similar to that of a lathe, and on this bed moves a saddle which carries the loading-tube and a rest for the breech-screw when drawn out of the gun. By touching the levers for elevating and running back, the gun is brought into the loading position exactly. A touch of another lever brings the saddle into its proper position, unlocking and turning the breech-screw as it comes. A touch on the third lever brings up a piston from the rear and makes it engage a catch in the breech-screw. The same lever moved in the opposite direction draws out the breech-screw upon a bed made to receive it on the saddle, which is then drawn out of the way by a reverse movement of the lever which brought

it up. As the saddle moves sideways, that part of it containing the loading-tube comes into position exactly behind the rear end of the bore. The small piston which withdrew the breech-screw now pushes the loading-tube into the gun. The projectile and its two half-charges are always kept ready on trolleys, which rise by hydraulic pressure from their places in the magazines, and arrive between the hydraulic rammer-head and the breech of the gun. Other levers thrust them forward into their places; the loading-tube is withdrawn and the breech closed by a reversal of the different movements just described, which do their work more quickly than the description of their action can be read. The breech of the gun can not be moved till all is complete, and the piece can not be fired unless the breech is accurately closed and locked to prevent its opening.

The absence of trunnions and the method of mounting makes it possible for two of these guns to be worked side by side in a turret, but the arrangements on the Italia and Lepanto are for firing *en barbette* from behind a breast-work which completely shields the men from the fire of an enemy. In the trial of the gun at Spezia, eighteen rounds were fired with charges of varying weight, but the new armor-plates were not used in the experiment. Fos-sano (Italian) and prismatic (German) powder were provided, but, as there was found to be little or no choice between them, the former was mostly used. The maximum velocity attained was 1,833 feet per second, and the highest energy 46,700 foot-tons, sufficient to raise the gun itself a height of 500 feet, and to penetrate thirty inches of wrought-iron. The following table exhibits the results of the different rounds fired:

No. of round.	Pounds of powder.	Weight of projectile.	Velocity—feet per second.	Pressure in bore of gun—foot-tons per square inch.
1....	496	.....	1,493	10.9
2....	551.2	.....	1,496	11
3....	551.2	{ Chilled 1,974 }	1,512	11
4....	606.3	{ Chilled 1,942 }	1,593	11.35
5....	606.3	{ Chilled 2,001 }	1,609	11
6....	661.4	{ Chilled 2,005 }	1,676	12.5
7....	661.4	{ Chilled }	1,686	12.4
8....	716.5	"	1,767	{ 13.6 14.1
9....	771.6	"	1,833	16.5
10....	716.5	"	1,761	14.5
11....	496	"	1,423	9.3
12....	551.2	"	1,596	{ 10.4 10.3
13....	551.2	"	Not taken	11.6
14....	771.6	"	1,581	16.4
15....	606.3	"	1,607	{ 12.3 12.5
16....	606.3	"	Not taken	13.5
17....	716.5	"	"	13.6
17....	716.5	"	"	13.8
17....	716.5	"	"	13.7
18....	771.6	"	"	{ 15.9 16

The results of these experiments threaten to turn the efforts of governments in the arming of navies in the direction again of large vessels and ordnance of heavy caliber and enormous power.

NAVY OF THE UNITED STATES. In comparison with last year, the condition and prospects of the navy are somewhat improved, although far from being yet what it is felt that they ought to be. From the report of the Secretary of the Navy for 1882, it is plain that the following facts and statements are worthy of careful consideration:

1. The available *cruising war-vessels* of the navy are—

One first-rate (the Tennessee).....4,480 tons displacement.  
Fourteen second-rates, from 1,100 to 4,000 " "  
Twenty-two third-rates, " 900 to 1,900 " "

Thirty-seven in all. Four of these, of less than 1,400 tons displacement, have iron hulls; all the others are built of wood. These vessels are good and commodious for all ordinary naval exercises, and useful for displaying the national flag upon the seas and in the harbors of the commercial world. But they are of low speed, with inferior engines and destructive capacity, compared with the present war-ships of other navies. It is urgently recommended by the Secretary of the Navy and his advisers in the service, that the wooden vessels be replaced, as speedily as possible, by new iron or steel cruisers. The honor and reputation as well as the interests of the country demand that the navy of the United States be placed on a footing of efficiency to meet all possible emergencies.

2. The available *armored vessels* are thirteen fourth-rates, the single-turreted monitors, from 1,800 to 2,100 tons displacement. These vessels were built twenty years ago, have no speed, and have been mostly laid up since the war. Three of them are in commission for harbor-defense, in the Hudson and Delaware Rivers and at Hampton Roads.

3. Under the head of *Ordnance*, it appears that the guns of the navy are—

Smooth-bore muzzle-loading (of various calibers)..... 2,232  
Parrott muzzle-loading (40-pound rifles)..... 77  
Muzzle- and breech-loading (converted rifles)..... 87

These last have fair power, and may be useful for the present at least; but the others are wholly behind the age. "With not one modern high-powered cannon in the navy, and with only eighty-seven guns worth retaining, the importance of action for the procurement of naval ordnance seems apparent, if the navy is longer to survive."

4. *Officers and Seamen*.—On July 1, 1882, the record stood:

937 officers, on sea duty, annual pay..... \$1,880,000  
644 " on shore duty, annual pay..... 1,563,200  
236 " waiting orders, " "..... 376,300  
1,817..Total.....\$3,822,800  
7,074 seamen, receiving..... 2,170,096  
950 apprentices, receiving..... 152,556

Add to these over 800 officers on the retired list, and the officers and privates of the marine



corps, receiving \$1,292,130, and the total annual pay amounts to \$7,440,182. The enormous disproportion of officers to only thirty-one vessels in commission is pointed out, and the gradual reduction, as ordered by Congress, from 1,817 to 1,562 is urged. This latter number will be amply sufficient for all the needs of the service. The Secretary recommends that the officers and seamen of the navy should be actively employed in all matters of the national Government upon or in direct connection with the ocean, so as to increase knowledge and improve and strengthen the navy. A useful change in the existing law of promotion is also recommended.

5. *Navy-Yards.*—There are seven large yards in full and expensive operation, viz.: at Portsmouth, N. H., Boston, New York, League Island (Philadelphia), Washington, Norfolk, and Mare Island, Cal., one other at Pensacola, Fla., and one in embryo at New London, Conn.; with naval stations at Key West, Fla., New Orleans, La., Sackett's Harbor, N. Y., Mound City, Ill., and Port Royal, S. C. The total cost of permanent improvements and repairs, including the sites, at these navy-yards, from their establishment to June 30, 1882, was \$54,237,772.67. Total expenditure for last year, under all bureaus (excluding Mare Island), was \$2,608,379.02. The number of officers and employes at the several navy-yards is about 7,300. Although these yards are too many and too expensive for any present or even prospective needs, it is not easy to determine what is best to be done with them. A commission appointed by order of Congress, in August, 1882, has the whole matter under consideration, and will report in due time upon the question of sale or retention. Boards of naval officers have been appointed to see to the disposal of old and unserviceable material in the navy-yards; but no sales have yet been made. Inspection Boards have also been appointed to examine all the vessels in the navy, and report as to those unfit for service and those unfinished in any navy-yard. It is expected that some definite results will soon be attained.

6. The present service rendered by the navy consists in keeping the vessels appointed on the several stations, viz., the North Atlantic, the South Atlantic, the European, the Pacific, and the Asiatic stations. On the first station are six ships, engaged in exercises in fleet tactics, etc. On the second are three vessels. On the third are three vessels, which were present at Alexandria, in Egypt, during the year's troubles, and gave timely aid and comfort to American citizens and others. On the fourth are seven vessels, looking after the interests of the country in the Pacific. One of the vessels was required in the waters of Alaska Territory. On the fifth station are four ships, and three others are under orders to join the station. Besides these there is the Apprentice Training Squadron, consisting of five vessels. Cruises to Europe were made during the sum-

mer, and a cruise to the West Indies ordered for the winter. Eight vessels were engaged on special service, surveying duty, experimental cruises, etc.

7. The several *Bureaus* to which the work of the navy is intrusted report encouraging progress. The Bureau of Ordnance is occupied in plans and efforts to secure the construction of high-powered guns, in experimenting with torpedoes and electric lights, etc. Urgent call is made for speedy aid of Government toward means for perfecting the making of steel forgings, and furnishing a steam-hammer, of which at present there is none in the country sufficient for heavy forgings. Under the Bureau of Equipment and Recruiting much was accomplished in the fitting out of ships, manufacture of cables and anchors, etc. Enlistments of seamen and apprentices were to the number of 5,260, 478 being boys. Congress having authorized the construction of two new steel cruising-vessels, estimates have been furnished of the probable cost by the Bureaus of Steam-Engineering and of Construction and Repair. According to these, the vessels will cost something less than \$2,000,000 each. It is also estimated that, to complete the four double-turreted monitors, which have been much disputed about from year to year, it will require \$3,165,000. The Advisory Board, having in charge the construction of the new steel cruisers, is proceeding with care and deliberation, the determination being to spare no pains to design and complete the two best ships which can possibly be constructed in this country. The Secretary of the Navy further recommends the construction of three or four smaller vessels, of high speed, etc., at a cost of \$7,000,000 each for two, and \$500,000 each for others. The sanitary condition of the navy, as reported by the Bureau of Medicine and Surgery, appears to be better than usual.

8. The United States *Marine Corps* contains 1,681 enlisted men, 984 on board ships in commission, and 877 occupied in shore duty. The legal number of privates is 2,500. As Congress has appropriated for only 1,500, the Secretary calls for appropriations for 2,000.

9. The *Naval Academy* is efficiently and satisfactorily conducted, and the *Naval Observatory* is doing good work. The erection of the new observatory (which was authorized by Congress three years ago), on the site selected on Georgetown Heights, is urgently recommended.

10. The *expenditures* for the year were \$13,936,294.96, being \$2,336,508 less than the appropriations available for the current expenses of the Navy. The estimates furnished by the chiefs of the respective bureaus (for the fiscal year ending June 30, 1884), for pay, supplies, building new ships, machinery, etc., amount to a little over \$27,000,000. The Secretary of the Navy thinks that they may be revised so as to amount to about \$21,000,000.

11. The *Light-House Service* and *Coast-Sur-*

vey occupy at present the time and labors of 81 officers and 275 seamen. The Secretary urges that, as these branches of the public service are maritime in their nature and purpose, they ought to be placed in direct connection with the Navy Department and severed from the Treasury Department. In like manner, the Secretary holds that it is every way desirable that the *Revenue-Cutter Service* be under the direction of the Navy Department, instead of forming a part of Treasury Department work. He argues the question quite fully, and presents various cogent reasons for the view he advocates. It hardly admits of doubt, he thinks, that the Revenue Marine and the Life-Saving Service should be joined to the navy, not only as a matter of economy, but as affording valuable training and discipline for younger and unemployed naval officers.

12. Under the head of the *Commercial Marine*, there is a full discussion of the importance of fostering and strengthening this branch of the nation's strength and prosperity. Every one knows how deeply depressed is the condition of American commerce, how largely the carrying-trade has fallen into the hands of foreigners, and how unwilling capitalists are to put their money into shipping under its present manifold disadvantages arising from foreign competition. It is urged, further, that not only does the passive policy of neglect injure our mercantile marine, but also that various impositions are heaped upon it in the way of fees, taxes, pilotage-dues, and other exactions. Several remedies are suggested, for the purpose of removing these impositions, extending protective measures to this neglected industry, and reforming the administration. Compulsory pilotage and numerous extravagant fees ought to be abolished. Government bounty should be extended for the construction of vessels in the United States, and for their navigation in the foreign trade. The French shipping law (early in 1881) has adopted this plan, and Bismarck has recommended similar measures for German shipping interests. "The most natural, legitimate, and effective method of protecting and reviving the merchant marine of the country, is to pay a compensation for carrying the United States mails in American ships on the great ocean-highways sufficient to result in the permanent establishment of fast steamship lines. It is not the cost of building the ships that deters capitalists from investing in lines of steamships: it is the impossibility of competing by such lines, during the earlier years of their existence, with the lines already in successful operation and sustained by large annual payments from foreign governments." In illustration of the policy pursued by other nations in this matter, it is stated that England has paid, as mail compensation to her steamship lines during the last fifteen years, from four to six million dollars annually. France, in 1878, paid for foreign mail service more than four

millions and a half; Italy more than one and a half million in 1879; Austria, the same year, a little over a million; while the United States paid for foreign mail service, the year ending June 30, 1880, only \$196,684. By this system, it is urged, these nations have virtually taken possession of the commercial waters of the world, and driven out our vessels; and by this method they have secured an auxiliary navy, every mail steamship company furnishing ships built according to governmental requirements, and subject to be taken for national use in time of war. Our country must follow a like policy, or she can never recover her place among maritime nations.

Recommending a reform of administration by establishing a Bureau of Mercantile Marine in the Navy Department, the Secretary concludes his report as follows: "These criticisms and recommendations are made with a sincere and earnest desire to promote the success of the navy and the commercial interests of the country. If the naval establishment is not to be made effective, it should be discontinued, and the fifteen millions annually expended should be reserved to procure, in national emergencies, the assistance of foreign ships and guns. If governmental measures are not soon adopted to promote the carrying-trade and to arrest the disappearance of American ships from the ocean, we shall soon cease to be a seafaring people, and shall not need to maintain a navy of our own. These are strong expressions, but they are justified and required by the present condition of our naval and maritime interests."

NEBRASKA. STATE GOVERNMENT.—The following were the State officers during the year: Governor, Albinus Nance, Republican; Lieutenant-Governor, G. C. Carns; Secretary of State and Adjutant-General, S. J. Alexander; Treasurer, G. M. Bartlett; Auditor of Public Accounts, John Wallichs; Attorney-General, C. J. Dilworth; Superintendent of Public Instruction, W. W. W. Jones; Secretary of Board of Agriculture, J. C. McBride; Commissioner of Public Lands and Buildings, A. G. Kendall; State Law Librarian, Guy A. Brown. Judiciary, Supreme Court: Chief-Justice, George B. Lake; Associate Justices, Amasa Cobb and Samuel Maxwell.

GENERAL CONDITION.—Governor Nance, in his message to the Legislature of 1883, remarking on the prosperous condition of the State, says:

Since the last regular session of the Legislature there has been a marked degree of prosperity in every department of industry, and our growth in population and wealth has been a marvelous event, even to those who had indulged the most sanguine anticipations in contemplating the possibilities of the future. A brief review of our State history may be profitably considered in this connection. At the date of admission into the Union, in 1867, the population of Nebraska was estimated at 70,000, and the aggregate valuation of taxable property of the State was \$20,115,252. The population at the present time, as estimated on the basis of a moderate increase over the census of 1880,



is not less than 600,000. The total assessed value of property as shown by the grand assessment roll of 1882, on file in the office of the State Auditor, is \$98,-537,475.11.

The sparse settlements of 1867 were remote from centers of trade and railroad connections, and were deprived of most of the comforts of life. The people of Nebraska are now brought into close relations with the commercial and social world, and it is a gratifying fact that every organized county in the State, except eight, has railroad facilities. Two principal agencies have accomplished this transformation. The homesteaders, under the liberal policy of the General Government, accepting a heritage which in itself was a valuable legacy, have toiled from year to year with untiring energy and splendid success in improving the lands thus secured. The capitalists of this and other countries, having a degree of faith in our future which has been more than justified by results, pushed the work of railroad extension in Nebraska with unexampled zeal, and thus opened the way for the large immigration which followed from the Eastern States and the Old World.

The policy of the General Government in granting aid to railroads, as in giving homesteads to settlers, was designed to promote the common welfare, and it speedily gave us a railroad system which has been a potent agency in developing our natural resources. The practical co-operation of the above-mentioned agencies has brought us to a period of prosperity which is contemplated with feelings of pride by every citizen of Nebraska.

**FINANCES AND EDUCATION.**—The receipts and disbursements of the Treasury for the two years ending November 30, 1882, as shown by the Treasurer's report, were as follow:

Balance in Treasury, November 30, 1880 .....	\$343,018 61
Receipts from all sources during the two years ending November 30, 1882, including transfers .....	1,943,307 64
Total amount .....	\$2,286,326 25
Disbursed during same period, including transfers .....	1,814,211 75
Balance on hand, November 30, 1882 .....	\$472,114 50

The bonded indebtedness of the State is:

Relief bonds due in 1885 .....	\$50,000 00
Funding bonds due in 1897 .....	449,267 35
Total .....	\$499,267 35

The aggregate valuation of property assessed for taxation in 1881, as shown by the Auditor's report, was \$93,142,456.99, and in 1882, \$98,-537,475.11. The rates of levy, and amounts that will accrue to the State on the assessment of 1882, are as follow:

General fund, four and one half mills .....	\$437,874 44
Sinking fund, one quarter mill .....	23,736 15
School fund, one mill .....	95,537 47
University fund, three eighths mill .....	36,951 56
Total .....	\$594,099 62

The number of acres of educational lands held by the State, November 30, 1882, was 2,-582,366.65. Of this amount 217,080 acres have been sold but not deeded, 489,440 have been leased, leaving 1,872,846.65 acres subject to sale or lease. During the two years preceding the above date 274,699.70 acres were leased at an estimated aggregate valuation of \$824,-099.10. During the same period 88,627 acres were sold for the sum of \$657,971.42, being an average of \$7.42 per acre.

The report of the State Superintendent of Public Instruction embodies a fund of valuable

information concerning the common-school system of the State. The school attendance in 1882 was 115,546, an increase of 14,770 over the number in attendance the previous year. The total value of school property is estimated at \$2,054,049.18. The permanent school fund is invested as follows:

Cash in Treasury, November 30, 1882 .....	\$185,208 87
United States four per cent bonds .....	15,000 00
County bonds .....	308,600 00
Mortgages .....	4,000 00
State funding bonds .....	326,267 35
Claims in hands of Attorney-General for collection .....	7,692 23
Notes from sales of school-lands .....	1,470,919 49
Grand total .....	\$2,262,687 44

The fund derived from this endowment has increased from year to year in about the same proportion as the increase of population, consequently the distribution per capita has not materially changed.

The unfortunate controversy which was for some time a disturbing element in connection with the affairs of the State University has been brought to a close, and the faculty is in process of reorganization upon a basis which enables the institution to enter upon a period of enlarged usefulness and prosperity.

A period of uninterrupted prosperity is reported by the Principal of the State Normal School—the last year being the most prosperous in its history. The catalogue shows an attendance of 318 students.

**STATE INSTITUTIONS.**—On the 30th of November, 1880, there were 193 patients in the Hospital for the Insane. During the two years following, 288 were received, 165 discharged, 1 escaped and 42 died; leaving 273 in the hospital November 30, 1882. The hospital farm has been very productive during the past year, and the crops produced have materially decreased the average cost of maintaining the inmates.

The average cost per capita per week of maintaining the inmates of the asylum, including salaries and expenses of every kind during the past two years, has been \$3.24½.

At the regular session of 1881 the Legislature provided for the construction of an additional building in connection with the Institute for the Deaf and Dumb. The building has been erected and completed by contract under the general supervision of the Board of Public Lands and Buildings, and is now partly occupied.

The total number of pupils in attendance is 120, an increase of 24 over the number reported two years ago. The average cost per capita per week of maintenance of inmates has been \$3.29.

The educational and industrial departments of the Institute for the Blind have been conducted with success. The number enrolled at the present time is 25. The average cost per capita per week of maintaining the inmates during the past two years has been \$5.33.

In accordance with the act of the Legislature

of 1881, providing for the organization of a State Reform School at Kearney, George W. Collins was appointed superintendent. The school was formally opened in June, 1881, and has been successfully operated since that time.

The discipline in the State-Prison has been all that could be desired and the health of the convicts under the supervision of the prison physician has been exceptionally good, only one death having occurred in the last two years. The number of prisoners reported by the warden on the 30th of November, 1882, was 261. Of these, 3 were United States prisoners, 7 were from New Mexico, and 39 from Wyoming—leaving 212 that were State convicts—an increase of only 6 over the number reported two years previously.

The Legislature of 1881 provided for the erection of a Home for the Friendless, and made an appropriation for that purpose, which has been successfully used.

**FISH COMMISSION.**—In March the Board of Fish Commissioners purchased a hatchery in Sarpy County. This property embraces fifty-two acres of land, upon which is situated a water-supply which is considered the finest in the State for a hatchery. In October, 1881, the commissioners received from the United States Commissioner of Fisheries, 500,000 salmon-eggs, which were immediately hatched, and the young fish distributed in the streams of the State. In November of that year the commissioners obtained a supply of German carp, a very valuable fish which may be readily propagated for food by every farmer who will provide himself with the proper facilities. The commissioners have also obtained and distributed a considerable number of brook and California trout.

**EXECUTIVE RECOMMENDATIONS.**—The Governor recommends legislation for the purpose of increasing the number of judges and judicial districts, and also "that a small appropriation be made for the purpose of preparing and publishing immigration documents under the immediate supervision of the State officers, giving full and reliable information concerning our varied resources."

The Secretary of State recommends the repeal of the act of 1869, providing for an annual State census, as the law is inoperative in some counties, the returns, therefore, being of little value. Instead of an annual census, it is recommended that a State census be taken in the year 1885, and every ten years thereafter, thus alternating with the United States census.

**CAPITOL-BUILDING.**—The west wing of the new Capitol-building, which was commenced in 1879, was completed and occupied by the close of 1881. The eastern extension was substantially completed by the 1st of November, 1882, and was formally accepted by the Board of Public Lands and Buildings on the first day of December, 1882. The total cost of the two wings was a little less than \$175,000.

**LEGISLATURE, SPECIAL SESSION.**—On the 10th

of May the Legislature convened in special session, at the call of the Governor, for the following purposes:

1. To apportion the State into three congressional districts, and to provide for the election of representatives therein.
2. To amend an act approved March 1, 1881, entitled "An act to incorporate cities of the first class, and regulating their duties, powers, and government," by conferring additional power upon cities of the first class, for the purpose of paving or macadamizing streets and alleys, and also providing for the creation and appointment of a Board of Public Works therein.
3. To assign the county of Custer to some judicial district in the State.
4. To amend section 69, chapter 14, of the compiled statutes of Nebraska, entitled "Cities of the second class and villages."
5. To provide for the payment of expenses incurred in suppressing the recent riots at Omaha and protecting citizens of the State from domestic violence.
6. To give the assent of the State to the provisions of an act of Congress to extend the northern boundary of the State of Nebraska.
7. To provide for the payment of the ordinary and contingent expenses of the Legislature, incurred during the special session hereby convened.

With respect to the boundary extension, the Governor says:

By an act of Congress approved March 23, 1882, the northern boundary of the State of Nebraska was extended so as to include all that portion of the Territory of Dakota lying south of the forty-third parallel of north latitude, and east of the Keya-paha River and west of the main channel of the Missouri River, subject to the provision that the act aforesaid shall not take effect so far as jurisdiction is concerned until the Indian title has been extinguished and the State of Nebraska shall have assented to the provisions of said act. This subject is submitted for your consideration, in order that you may determine what action shall be taken by the State for the purpose of giving final force and effect to said act of Congress.

The session was closed on the 25th of May.

**TEMPERANCE.**—A temperance convention of the ministers of the State was held in Lincoln on the 9th and 10th of May, which adopted the following among other resolutions:

*Resolved*, That the people hold the only power that can settle the question, and to the people the question must finally be submitted, and we therefore appeal to our next Legislature, and ask them to submit the question to the people of the State in the form of a constitutional amendment prohibiting the manufacture and sale of alcoholic liquors as a beverage.

*Resolved*, That while we labor earnestly for the adoption of such constitutional amendment, and for the enactment of suitable laws to carry it into effect, we appreciate the fact that intemperance is a vice, and that against its influence we must labor and pray until human nature has become subject to the grace of God through our Lord Jesus Christ; and that the hope of the enforcement of laws relating to intemperance lies in an awakened public conscience and a right public sentiment.

*Resolved*, That the fact that the American saloon is a licensed institution makes it none the less an evil, and that the paying of a large sum of money for the privilege of committing a crime, abates none of the heinousness of the crime, but tends to connect those who take the money with the sin.

*Resolved*, That speedy prohibition by constitutional amendment for the State and nation is desirable, possible, and highly probable in the near future.



**PARTY CONVENTIONS.**—The Republican State Convention met in Omaha on September 20th, and nominated the following ticket:

For Governor, James W. Dawes, of Saline County; for Lieutenant-Governor, A. W. Agee, of Hamilton; for Secretary of State, E. P. Roggen, of Lancaster; for Treasurer, Loran Clark, of Boone; for Auditor, John Wallichs, of Hall; for Commissioner of Public Lands and Buildings, A. G. Kendall, of Howard; for Attorney-General, Isaac Powers, of Dakota; for Superintendent of Public Instruction, W. W. W. Jones, of Lancaster; for Regent of the University, C. H. Gere, of Lancaster.

The platform adopted is as follows:

*Resolved*, That the Republicans of Nebraska, in convention assembled, stand by the fundamental principles of the Republican party as enunciated in an unbroken line of national and State platforms, the chief of which are free labor; free speech; the right of every qualified citizen to vote once at every election, and have that vote counted under the restrictions of just and equitable election laws; free, non-sectarian schools; sound currency on a specie basis, under national control; the raising of national revenues by taxation of luxuries and articles of consumption not essential to the comfort and well-being of the people, and from a tariff on imports so adjusted as to protect home labor and the investment of capital in home industries; and legislative control of corporations.

*Resolved*, That we uphold and maintain the enforcement, by well-considered legislation, of the clause in our State organic law that prohibits unjust discriminations and extortions by railroad corporations, while recognizing the importance of fostering and protecting them as necessary factors in our progress and prosperity; and that we trust to the honesty and courage of the people, in their political capacity, to repel encroachments of corporate power upon the rights and privileges of citizens on the one hand, and, on the other, to deal justly and fairly with all property interests under whatever name or form, without unjust discrimination or extortion in the matter of levying taxes, or regulating prices of commodities or charges for services.

The following were the Republican nominees for Congress:

First District, A. J. Weaver, of Richardson; Second District, James Laird, of Adams; Third District, E. K. Valentine, of Cuming.

The Democratic State Convention also met in Omaha in September. Its nominees were the following: For Governor, J. S. Morton; Lieutenant-Governor, J. H. Warner; Secretary of State, C. J. Bowlby; Auditor, Charles Leach; Attorney-General, J. C. Crawford; Commissioner of Public Lands, Henry Grebe; Superintendent of Public Instruction, Charles A. Speice; Regent of University, John H. Burks; Treasurer, P. D. Sturdevant.

The Greenback State Convention was held in Lincoln. This body appointed a committee to wait upon the Anti-Monopoly State Convention, which met in Hastings on September 27th. The result was the following joint ticket:

For Governor, E. P. Ingersoll, of Johnson County, President of the State Farmers' Alliance; for Lieutenant-Governor, D. P. Reynolds, of Hamilton; for Secretary of State, Thomas Kirtley, of Franklin; for Treasurer,

P. D. Sturdevant, of Fillmore; Auditor, John Beatty, of Wheeler; Attorney-General, John Barnd, of Buffalo; Superintendent of Public Instruction, J. J. Points, of Douglas; Commissioner of Public Lands, C. H. Madley, of Adams; Regent of University, Thomas Bell, of Otoe.

**ELECTION RETURNS.**—The election in November resulted in the choice of the Republican State ticket by a plurality vote, except in the case of Treasurer, to which office Sturdevant, the joint nominee of the opposition, was chosen. The following are the figures, excluding a few hundred scattering votes:

FOR GOVERNOR.	
Dawes.....	49,495
Morton.....	28,562
Ingersoll.....	16,991
Total.....	89,048
FOR LIEUTENANT-GOVERNOR.	
Agee.....	44,520
Warner.....	26,622
Reynolds.....	17,656
Total.....	88,798
Agee over Warner.....	17,898
Agee over Reynolds.....	26,864
FOR SECRETARY OF STATE.	
Roggen.....	44,765
Bowlby.....	26,420
Kirtley.....	17,124
Total.....	88,309
Roggen over Bowlby.....	18,345
Roggen over Kirtley.....	27,641
Roggen over all.....	1,221
FOR AUDITOR.	
Wallichs.....	44,621
Leach.....	26,381
Beatty.....	17,320
Total.....	88,272
Wallichs over Leach.....	18,290
Wallichs over Beatty.....	27,301
Wallichs over all.....	970
FOR TREASURER.	
Clark.....	42,021
Sturdevant.....	46,132
Total.....	88,153
Sturdevant over Clark.....	4,111
FOR ATTORNEY-GENERAL.	
Powers.....	44,459
Crawford.....	26,447
Barnd.....	16,883
Total.....	87,789
Powers over Crawford.....	18,012
Powers over Barnd.....	27,576
Powers over all.....	1,129
FOR COMMISSIONER OF PUBLIC LANDS AND BUILDINGS.	
Kendall.....	44,941
Grebe.....	26,763
Madley.....	17,182
Total.....	88,886
Kendall over Grebe.....	17,578
Kendall over Madley.....	27,159
Kendall over all.....	896
FOR SUPERINTENDENT OF PUBLIC SCHOOLS.	
Jones.....	44,718
Speice.....	26,314
Points.....	17,359
Total.....	88,391
Jones over Speice.....	18,399
Jones over Points.....	26,854
Jones over all.....	1,040

## FOR REGENT OF THE UNIVERSITY.

Gere.....	43,221
Burks.....	38,113
Bell.....	4,769

A vote was also taken on a proposed amendment to the Constitution, extending the right of suffrage to women, with the following result: For the amendment, 25,756; against, 50,693. For Congressmen three Republicans were elected:

## FIRST DISTRICT.

Weaver.....	17,022
Redick.....	12,690
Gilbert.....	8,707

## SECOND DISTRICT.

Laird.....	12,988
Moore.....	10,012
Harman.....	8,060

## THIRD DISTRICT.

Valentine.....	11,284
Turner.....	7,842
Munger.....	9,882

The Legislature, to meet in January, 1883, will consist on joint ballot of seventy-one straight Republicans, forty Democrats, and twenty-two Anti-Monopolists, the Republicans having a majority in the House, and the opposition in the Senate.

NETHERLANDS, THE, a monarchy of Western Europe. The Constitution, proclaimed in 1848, vests the legislative authority in the King and the two Houses of the States-General. The First Chamber is composed of 39 members, elected by the Provincial Councils from among the class paying the highest taxes. The Second Chamber is elected by ballot, at the rate of one deputy to every 45,000 inhabitants, and consists of 86 members. Every Netherlander who is of age, is domiciled, and pays from 20 to 160 guilders of direct taxes, according to the locality, has the right to vote. Clergymen, judges, and provincial governors are ineligible. The members of the Second Chamber receive pay. One half the members of the Second Chamber retire every two years, and one third the members of the Upper House every three years. The initiative in legislation is confined to the Lower House, the Upper House possessing only the rights of approval and amendment. The ministers must attend the meetings of both Houses, and have a voice in the deliberations, but no vote. The veto power, reserved to the King, is never exercised. Either or both Houses may be dissolved by the King, but new elections must take place within forty days. The executive authority is exercised in the name of the sovereign by a responsible council of ministers. The reigning sovereign is William III, born in 1817, who succeeded his father, William II, March 17, 1849. The heir-apparent is Alexander, Prince of Orange, his only son, born in 1851. The Cabinet is composed of the following members: Baron W. F. van Rochussen, Minister for Foreign Affairs, and appointed June 19, 1881, who replaced Baron Lynden van Sandenburg as President of the Council in the latter part of 1882; Dr. C. Pynacker Hordyk, Minister of the

Interior, appointed February 9, 1882; Dr. A. E. J. Modderman, Minister of Justice, appointed August 19, 1879; Baron Dr. C. T. van Lynden van Sandenburg, Minister of Finance, appointed in August, 1881; Dr. O. W. Stavenisse de Brauw, Minister of the Colonies, succeeding Baron van Goltstein; Baron G. J. G. van Klerck, Minister of the Waterstaat, Commerce, and Industry, appointed August 19, 1879; Major-General A. E. Reuther, Minister of War, appointed August 19, 1879; W. F. van Erp Taalman Kip, Minister of Marine.

AREA AND POPULATION.—The decennial census of 1879 gave the area of the Netherlands as 32,972 square kilometres, or 12,678 square miles, and the population as 4,012,693, comprising 1,983,164 males and 2,029,529 females. The total population in 1869 was 3,579,529. The annual enumeration of December 31, 1881, gives the population as 4,114,077, distributed among the eleven provinces as follows:

PROVINCES.	Population.	PROVINCES.	Population.
North Holland.....	713,288	Overijssel.....	277,946
South Holland.....	835,112	Drenthe.....	120,784
Utrecht.....	197,688	Groningen.....	287,153
Zealand.....	189,806	Friesland.....	329,309
North Brabant.....	475,498		
Limburg.....	242,122	Total population.	4,114,077
Guelderland.....	476,026		

The movement of population for four years was as follows:

YEARS.	Marriages.	Births.	Deaths.	Excess of births.
1878.....	30,710	150,493	98,486	52,007
1879.....	30,655	155,089	98,099	56,990
1880.....	30,849	151,850	102,806	48,574
1881.....	29,849	150,690	95,447	55,243

The population was divided in 1879, as to religion, into 2,469,814 Protestants, 1,439,137 Catholics, 81,693 Israelites, and 29,049 of other beliefs.

The population of the chief cities, on December 31, 1881, was as follows:

CITIES.	Population.	CITIES.	Population.
Amsterdam.....	328,047	Leyden.....	41,631
Rotterdam.....	157,270	Haarlem.....	39,977
The Hague.....	123,499	Tilburg.....	29,469
Utrecht.....	71,387	Leeuwarden.....	29,079
Groningen.....	48,000	Maestricht.....	28,917
Arnhem.....	42,761	Dordrecht.....	27,722

The number of domestic letters forwarded by the post in 1881 was 44,144,240; of foreign letters, 13,298,865; of postal-cards, 17,640,758; total letters, 75,083,863; of newspapers for the interior, 36,646,830; for foreign parts, 3,308,804; total newspapers, 39,955,634. The receipts amounted to 4,260,168 guilders; the expenses to 3,005,286 guilders. (The guilder, or florin, is equivalent to 38½ cents.)

The length of the state telegraph lines at the commencement of 1882 was 3,943 kilometres, or 2,460 miles; the length of wires 14,373 kilometres, or 8,980 miles. The state had 203 stations, the companies 215. The number of dispatches sent in 1881 was 3,281,792, of which 1,972,158 were of domestic, and 1,279,495 of foreign, destinations. The receipts



amounted to 1,083,190 guilders; the expenses to 1,416,734 guilders.

The length of the railroads in operation on the 1st of January was 1,976 kilometres, or 1,230 miles, of which 1,010 kilometres, or 630 miles, belonged to the state.

The export and import trade of Holland with the principal foreign countries, and with the Dutch colonies, was in 1879 and 1880, in millions of guilders and tenths of millions, as follows:

COUNTRIES.	IMPORTS.		EXPORTS.	
	1879.	1880.	1879.	1880.
German Zollverein.....	207.5	238.6	259.3	251.7
Hanse towns.....	18.2	12.4	10.4	14.1
Great Britain.....	219.0	212.2	129.0	146.6
Belgium.....	111.8	104.3	94.2	100.6
Russia.....	82.9	45.6	7.5	9.2
France.....	16.9	15.1	10.3	10.4
Other European countries.....	30.8	33.5	15.2	29.0
Total Europe.....	682.2	656.8	526.2	561.9
United States.....	54.2	81.3	9.1	15.6
Other American countries.....	14.3	12.2	2.8	8.1
Total America.....	69.6	93.5	11.9	18.8
British India.....	29.8	24.6	0.3	0.3
Other Asiatic countries.....	1.8	.....	0.2	.....
African countries.....	5.0	7.0	1.2	1.5
All others.....	0.9	0.3	.....	.....
Total foreign countries.....	789.5	782.5	540.0	582.6
Dutch East Indies.....	55.9	56.1	41.4	46.8
Dutch West Indies.....	1.1	0.9	0.1	0.2
Total colonies.....	57.1	57.1	41.6	47.0
Total commerce.....	846.6	839.7	581.6	629.7

The number of sailing-vessels entering Dutch ports in 1881 was 3,539, of 2,662,324 tons, of which 3,326, of 2,609,601 tons, were laden, and 1,246, of 869,001 tons, were of Dutch nationality; the number of steamers was 4,863, of 7,417,575 tons, of which 4,776, of 7,292,876 tons, were with cargoes, and 1,089, of 2,054,918 tons, were Dutch. The merchant marine in 1881 consisted of 802 sailing-ships, of 658,887 cubic metres displacement, and 78 steamships, displacing 204,396 cubic metres.

Colonies.—The colonial possessions of the Netherlands have a total area of 666,700 square miles, and contain more than six times the population of the mother-country.

Java and Madura, the most important of the Dutch East India colonies, with an area of 51,324 square miles, have, according to the census of 1879, a population of 19,298,804 persons. The rest of the Dutch East Indies, comprising Sumatra, Riau, Banca, Billiton, Borneo, Celebes, the Moluccas, New Guinea, Timor, Bali, etc., have collectively an area of about 665,000 square miles, and a population estimated at 8,400,000. The European and foreign population of the Dutch East Indies is as follows: European civilians, 39,318; Chinese, 308,886; Arabs, 15,012; Hindoos and others, 33,221. Nearly three fourths live in Java and Madura. The capital of Java, Batavia, contains 102,901 inhabitants.

The other important cities are Samarang, with 69,141, and Soerabaya, with 120,254 inhabitants.

The American colonies of the Netherlands are two in number: Surinam, or Dutch Guiana, 45,890 square miles in area, containing in 1880 69,476 inhabitants, inclusive of about 17,000 Indians and bush negroes descended from maroons, or runaway slaves; and the colony of Curaçoa, or the Dutch West Indies, 434 square miles in extent, and containing 42,530 inhabitants.

The item of colonial administration in the Netherlands budget applies to the West India colonies only. The expenditures of Surinam for 1882 are given in the estimates as 1,330,300 guilders, the receipts as 1,164,944; the expenditures of Curaçoa as 565,498, the receipts 528,631 guilders. The great East India colonies have their separate budget voted by the States-General. The estimates state the receipts for 1882 as 138,913,703 guilders, the expenditures as 148,499,631 guilders. The receipts in 1881 amounted to 142,602,554 guilders, the expenditures to 144,671,160 guilders. In normal years a large surplus revenue is produced for the benefit of the home government, averaging between 1869 and 1876 nearly 20,000,000 guilders. The sources of revenue are given in the budget for 1882 as follow:

RECEIPTS.	In Holland.	In the Indies.	Total.
Sales of coffee.....	35,668,043	10,048,000	45,716,043
Sales of quinine.....	183,867	.....	183,867
Sales of tin.....	4,825,499	.....	4,825,499
Opium monopoly.....	.....	18,984,000	18,984,000
Customs.....	.....	9,015,000	9,015,000
Land-tax.....	.....	18,028,000	18,028,000
Salt duty.....	.....	7,105,500	7,105,500
Posts and telegraphs.....	.....	1,256,500	1,256,500
Railroads.....	855,000	2,220,000	3,075,000
Various sources.....	719,642	80,004,652	80,724,294
Total.....	42,252,051	96,661,652	138,913,703

Of the disbursements 24,859,110 guilders were expended in Holland, and 123,640,521 guilders in the colonies. About one third of the annual expenditure is for the army, and one third for the general administration in Java and the Netherlands.

The "culture system," or species of serfdom on which the Government of Java is based, has been abolished in respect to the production of indigo, pepper, tea, tobacco, and other articles, and is now confined to the cultivation of coffee and sugar. Forced labor in the production of the sugar-cane is to be done away with likewise in 1890. The bulk of the population are agricultural laborers. Nearly the whole of the soil is claimed as Government property. Private ownership is confined to the northwestern residencies, where a number of Netherlanders possess estates. The right to exact forced labor from the natives on Government or private property is limited to one day out of seven, for which the laborers receive no wages. The vast and complicated official organization has a single head, the Governor-General, who has the

power to make laws and regulations subject to the restrictions laid down in the code of regulations adopted in 1854, and to the authority reserved to the States-General. The Governor-General is Frederik s'Jacob, who entered upon his duties in July, 1881.

The sales of colonial produce on account of the Government are transacted in Holland on the so-called consignment system by the Netherlands Trading Company, which has been the Government's agent since 1824. This company, which has made enormous profits ever since the establishment of the culture system in 1832, originally advanced the capital to start that system, on which the state guaranteed  $4\frac{1}{2}$  per cent interest. By a new contract concluded with the company in November, 1882, the commissions on sales are reduced from 2 to  $1\frac{1}{2}$  per cent, and the Government is relieved of the costs of the factory in Batavia.

The foreign trade of the Dutch East Indies, in 1878 and 1879, was of the following amounts, in guilders:

IN 1878.	Imports.	Exports.
Merchandise.....	115,971,000	172,490,000
Specie.....	24,479,000	7,477,000
Total.....	140,450,000	179,967,000

IN 1879.	Imports.	Exports.
Merchandise.....	136,668,000	171,758,000
Specie.....	17,981,000	8,988,000
Total.....	154,651,000	175,743,000

The principal exports in 1879 were of the following values:

EXPORTS.	Guilders.
Coffee: By the Government.....	33,499,000
" By individuals.....	32,257,000
Sugar.....	47,867,000
Tin: By the Government.....	8,772,000
" By individuals.....	8,531,000
Indigo.....	2,950,000
Hides.....	1,895,000
Cloves and nutmegs.....	2,503,000
Rice.....	1,623,000
Tobacco.....	14,612,000
Tea.....	1,821,000

The revolt of the Atchinese in Sumatra continued through the year 1882. In September an important victory of the Dutch troops was announced to have been achieved on the 13th, by which the rebels lost their chief, Nyahassin, and many men. Later dispatches showed that the rebellion was spreading. The replacement of the military by a civil government seemed to have been premature, but Minister de Brauw, when questioned on the subject of restoring the military administration, expressed unwillingness to interfere with the authority of the Stadtholder of East India.

ARMY AND NAVY.—The Dutch army consists of two distinct elements, the volunteers and the militia. The militia was organized in 1861, to supplement the volunteer forces. They are drawn by lot, and serve nominally five years; but after being drilled for a year they are al-

lowed to go on furlough, and are only called in for six weeks each year. Besides the regular army, there is a civic guard called the Schuttern, composed of all the members of communes between twenty-five and thirty-five years of age. The regular army on the war footing numbers 2,320 officers and 62,687 men. The army of the Dutch East Indies is composed entirely of volunteers. In 1881 it mustered 1,456 officers and 31,693 men. Of the rank and file, 15,399 were Europeans, 156 Africans, and 16,130 natives.

The navy in 1882 consisted of 103 steamers with 393 guns, and 19 sailing-vessels with 157 guns. (See NAVIES OF EUROPE.)

FINANCE.—The total revenues in the five years 1873-'77 averaged 110,000,000 guilders, the expenditures slightly more. The budget estimates for 1882 place the total receipts at the sum of 107,421,555 guilders, the expenditures at 129,987,644 guilders.

The public debt in 1882 stood at 941,308,450 guilders, including 10,000,000 of paper money; 613,294,400 guilders bore interest at  $2\frac{1}{2}$  per cent; 90,312,150 at 3 per cent; 10,150,000 of sinking-fund bonds at  $3\frac{1}{2}$  per cent; and 186,239,400, being the old national debt, and 31,312,500 guilders of new bonds issued under the law of 1878, at 4 per cent.

FOREIGN RELATIONS.—The operations of the British in North Borneo gave rise to considerable mistrust and excitement in Holland, which found expression in the Chamber in a request to the ministry to have the boundary-line fixed between this new British colony and the Dutch possessions in Southern Borneo. The ministry announced that they had the assurances of the British Government that British sovereignty would not be proclaimed on the island, and that they would therefore not take the responsibility of creating difficulties on the question. A large part of the year was taken up with settling a new commercial treaty with France, which was framed on the principle of the most favored nation. An international fishery convention, between Holland, England, France, Belgium, Germany, and Denmark, was signed in May. It provides for guarding the fisheries by cruisers from the navies of the contracting powers, and for the decision of disputes between fishermen of the different nationalities.

POLITICS.—The year, which witnessed a remarkable and prolonged ministerial crisis, ended with no important results except that of spurring the Government to take up the questions which have been postponed for three years. The financial difficulties of the Government caused by the continued deficits in the home and East Indian budgets reached no conclusion in 1882, the proposition to raise a new loan to cover the deficits and extend the railroads being postponed. There is a total deficiency of 53,500,000 guilders in the accounts of the Netherlands and 44,000,000 in those of Java, including the estimated deficits for 1883. The question of amending the school laws was



brought up by the Catholics and Evangelical religionists, and, during the discussions, the Liberals showed a less uncompromising disposition than heretofore.

NEVADA. The Governor of Nevada during the year was John H. Kinkead. His term expired on January 1, 1883, and he was succeeded by Jewett W. Adams, elected on the Democratic ticket.

The affairs of the State have been without any important change; its growth in population has been slow, and its prosperity in mining diminished.

The Nevada Asylum for the Insane has been constructed and furnished, at the comparatively small cost of \$63,000, and put in actual operation this year.

The law case pending before the Supreme Court in 1881, upon the payment of \$1,279.79, claimed by the Nevada Orphan Asylum in Virginia City as its due portion of the money appropriated by the previous Legislature for distribution among all the orphan asylums in the State which are conducted in a non-sectarian manner, has been decided adversely to the said institution, upon the ground that it is sectarian. This asylum was founded nearly twenty years ago, and, with the school attached to it, is under the management of the Sisters of Charity, who are Catholics. The Court held, as a certain principle, that "not who are instructed, but what is taught, must determine the question of sectarianism."

The public debt of Nevada is \$336,587.50, and the State has \$331,127.03 in coin on hand. The receipts for the years 1881 and 1882 amounted to \$302,435.74 and \$303,445.94 respectively; the expenditures, to \$346,117.01 and \$286,842.66, leaving for the two years in the Treasury a cash balance of \$27,868.99. For the collection of her revenue the State now pays the collector at the rate of 14 per cent.

The aggregate valuations of assessable property in the State, for the year 1882, amounted to \$29,109,889.86, which sum included the net proceeds of mines.

The depreciation of property has not been general throughout the State. Its value has decreased in eight of the fourteen counties, namely, Douglas, Eureka, Humboldt, Lyon, Nye, Ormsby, Storey, and White Pine, to the collective amount of \$2,071,980.45, of which sum \$1,286,607.29 belongs to Storey County alone, the depreciation of this county's property having been the greatest in the whole State, and in less than a twelvemonth. In 1881 it was valued at \$5,212,823.39; in 1882, at \$3,926,216.10. In the remaining six counties—Churchill, Elbo, Esmeralda, Lander, Lincoln, and Washoe—assessable property has, on the contrary, increased in value for 1882 to an aggregate amount of \$1,074,77.15 over 1881, the depreciation for the whole State amounting to \$997,903.30.

With reference to the net proceeds of mines,

the decrease for 1882 was principally in the counties of Esmeralda, Eureka, and Lander, to a total amount of \$801,817.11, making an aggregate decrease of assessable valuations in the State of \$1,799,720.41, as compared with those for 1881.

The assets of the State School fund amount to \$622,008.85, of which sum \$576,610.50 are invested in undoubted securities. The Governor predicts the time to be near at hand when the tax-payers will be entirely free from the necessity of contributing any part of their money for the support of the common schools.

The whole number of children of school age, from six to eighteen years, throughout the State, at the close of 1882, was 10,483. The money apportionment made for them by the Superintendent of Public Instruction, in his semi-annual report for the first half of 1883, amounts to a total of \$30,354.40, or at the rate of little less than six dollars a year for each child. Storey County has by far the largest number of children of school age—3,152; Ormsby and Eureka coming nearest to it, with 1,182 and 1,014 respectively. Churchill County has the smallest number of such children, 96.

The State University fund amounts to \$56,630, invested in undoubted securities, as the School Fund. The expense of keeping this university open the Governor thinks to exceed by much the benefits resulting from it.

The public institutions are under praiseworthy management in every respect, and realize the objects for which they were intended.

The number of the insane persons in Nevada, brought from the asylum at Stockton on July 1, 1882, and lodged in the asylum erected for them at Reno, was 148. The Legislature of 1879 had appropriated for their care and treatment at Stockton during the years 1881 and 1882 the sum of \$100,000, the unemployed balance of which, amounting to \$15,682.50, has now been expended in bringing them over from Stockton, and in supporting the institution.

In the State Penitentiary the number of convicts on January 1, 1881, was 138, increased soon after to 162, and then, in the course of two years, gradually diminished, their number on December 31, 1882, being 113. Two of them are women. Four escapes from the State-Prison have occurred during 1881-'82, but all of the fugitives have been recaptured. The cost to the State for feeding, clothing, and guarding each prisoner during the two biennial terms of 1879-'80 and 1881-'82, has been 72'35 and 66'96 cents *per diem*, respectively. Of the four items making up this cost, as set down by the warden in his last report, the highest is that of "salaries, arms, and ammunition—37'78 and 32'02 cents"; nearest to it comes that of "commissary stores—27'85 and 27'73 cents," respectively. At the session of 1879, the Nevada Legislature appropriated \$100,000 for the current expenses of the State-Prison, and

\$60,000 for its boot and shoe manufactory, in which occupation the convicts are almost exclusively employed. During the two years 1881-'82 there have been from this factory \$1,995.86 of profits, with about \$600 of bad debts. Out of the proceeds from the sales of boots and shoes manufactured at the Nevada Penitentiary within the said two years, the warden has paid into the State Treasury the sum of \$55,836.69.

The Republicans of Nevada met in State Convention at Reno on September 4th, to nominate their candidates for the several State offices, a member of the Lower House of Congress, and a Supreme Court Judge, as follow:

For Governor, Enoch Strother; Lieutenant-Governor, Charles E. Laughton; Secretary of State, J. M. Dormer; State Treasurer, George Tuffy; State Comptroller, J. F. Hallock; State Attorney-General, W. H. Davenport; State Printer, J. C. Harlow; State Superintendent of Public Instruction, C. S. Young; State Surveyor-General, Charles S. Preble. For Judge of the Supreme Court, O. R. Leonard; Clerk of the Supreme Court, Charles F. Bicknell; member of Congress, C. C. Powning.

The following, among other resolutions, were adopted:

*Resolved*, That we have faith in the prudent and sagacious administration of President Arthur, and believe it will result in promoting the best interests of the country.

*Resolved*, That the presence in our midst of a servile race of aliens, incapable of assimilation with our institutions, is a perpetual menace to all classes of society. The relief extended to our people by the passage of a law excluding the Chinese by a Republican Congress, and approved by a Republican President, is a genuine cause of satisfaction. We are in favor of strenuously enforcing the provisions of said law, and we pledge the Republican party to labor now and henceforth to secure such further legislation as will permanently exclude the Chinese.

*Resolved*, That we recognize the paramount importance of maintaining unimpaired the free public-school system of the State. We shall defend it against sectarian, political, or other improper influences, and we favor such additional legislation as the condition and wants of the common schools of the State may require. As free institutions, they should be so conducted as to satisfy poor and rich alike; and upon this principle we urge the adoption of some system by which this State shall furnish the text-books at the lowest possible figure.

*Resolved*, That owing to the remote position of Nevada from the seaboard, and the entire absence of navigable waters and competing lines of railroads to and from commercial centers, we demand from Congress such wholesome and effective legislation as will place our people on terms of equality in respect to transportation charges with communities specially favored by railroad monopolies.

*Resolved*, That we pledge the Republican party of Nevada to such a course of enlightened legislation as will extend to railroad and all other corporations doing business in this State the same protection and the same rights before the law as are accorded to individuals—no more and no less.

The Democratic party of Nevada held its State Convention at Eureka on September 6th, and nominated the following candidates:

For Governor, Jewett W. Adams; for Lieu-

tenant-Governor, William Burke; for Secretary of State, James W. Richards; for State Treasurer, George H. Shepherd; for State Comptroller, P. J. Dunne; for State Attorney-General, George W. Merrill; for State Superintendent of Public Instruction, A. E. Key; for State Surveyor-General, George Ernst; for State Printer, D. E. McCarthy; for Judge of the Supreme Court, M. N. Stone; for Clerk of the Supreme Court, A. E. Ham; for member of Congress, G. W. Cassidy.

For District Judges: for the Third District, William Sewell; for the Fifth District, W. O. Grimes; for the Sixth District, Henry River; for the Seventh District, J. McMullen.

The Democrats elected their nominees, Jewett W. Adams for Governor, George W. Merrill for State Attorney-General, and re-elected G. W. Cassidy for the member of Congress from Nevada. The Republicans elected their nominees for Lieutenant-Governor and for all the other officers of the Executive Departments, also for State Printer, for Surveyor-General, for Judge of the Supreme Court, and for Clerk of that court. The majority for Governor was 881.

The State Legislature is composed of 36 Representatives and 20 Senators, ten of whom hold over from the previous election. This body at its meeting in January, 1883, will be divided as follows: In the Senate, Democrats 12, Republicans 8; in the House of Representatives, Republicans 24, Democrats 14: the Republicans having a minority of 4 in the Higher House, a majority of 10 in the Lower, and of 8 on joint ballot.

**NEW HAMPSHIRE.** The State officers were as follow: Governor, Charles H. Bell; Secretary of State, Eli B. Thompson; State Treasurer, Solon A. Carter; Councilors, Thomas J. Jameson, Lyman D. Stevens, John W. Wheeler, George H. Stowell, Arthur L. Meserve.

**DEBT AND FINANCES.**—The State debt is as follows:

Net indebtedness June 1, 1881.....	\$3,372,770 05
“ June 1, 1882.....	8,830,757 48
Reduction during the year.....	\$42,018 57
Receipts from all sources during the year.....	\$909,608 90
Cash on hand June 1, 1881.....	37,507 87
Total receipts during the year.....	\$947,116 27
Expenditures for all purposes during the year.....	855,894 79
Cash on hand June 1, 1882.....	61,111 43
Total.....	\$947,116 27

The ordinary State expenditures during the last fiscal year amounted, in the aggregate, to \$201,492.80; the extraordinary to \$59,441.41. This sum includes the expenses made on the new prison, \$4,854.31; express taxes and interest refunded, \$652.57; Yorktown centennial, \$7,000; National Guard's equipments, \$10,000, and other items of outlays of no frequent occurrence.

**RAILROADS.**—The names of all the railway lines operating in New Hampshire, either



within her limits only, or in connection with lines worked in other States, and the tax assessed on each of them by the State Board of Equalization; also the names of her several telegraph companies, and the amounts of the taxes levied on them respectively, are given in the following lists, published in October, 1882:

RAILROADS.	Amount of tax assessed on each road.
Eastern.....	\$3,997 25
Boston and Maine.....	16,511 14
Ashuelot.....	1,696 23
Boston, Concord, and Montreal.....	23,762 73
Fitchburg.....	192 60
Nashua and Lowell.....	4,275 12
Wilton.....	2,890 90
Cheshire.....	12,914 90
Grand Trunk.....	6,852 05
Northern.....	16,490 43
Concord.....	27,762 20
Manchester and North Weare.....	901 84
Concord and Portsmouth.....	5,459 52
Dover and Winnepesaukee.....	8,839 43
Portsmouth, Great Falls, and Conway.....	2,502 05
Manchester and Lawrence.....	17,196 67
Concord and Claremont.....	5,856 59
Sullivan County.....	5,751 00
Worcester and Nashua.....	1,987 34
Mount Washington.....	1,595 56
Suncook Valley.....	1,613 63
Portland and Rochester.....	173 43
Monadnock.....	1,141 40
Portland and Ogdensburg.....	445 14
Total.....	\$170,008 85

The taxes assessed upon the several telegraph companies are shown in the following table:

TELEGRAPH COMPANIES.	Amount of tax assessed on each line.
Western Union.....	\$657 81
American Union.....	83 83
Atlantic and Pacific.....	22 94
Northern.....	19 20
Maine.....	49 43
Montreal.....	24 75
New Hampshire.....	9 17
Chester and Derry.....	8 00
American.....	45 00
Stratford and Colebrook.....	8 05
Total.....	\$867 73

The valuation of the railroads for assessment purposes has been reduced this year to \$82 on \$100 of supposed actual value; and that has been the average rate of their taxation throughout the State. The aggregate amount of railroad-tax for 1882 is about \$13,000 less than in 1881, because of the said undervaluation, and because the lower rate of taxation has now been assessed on other property within the State generally.

The land and water areas of New Hampshire have been ascertained, from accurate measurements by Henry Gannett, the geographer of the tenth census, as follows:

"The total land area of New Hampshire, by counties, in square miles, is, Rockingham, 740; Strafford, 320; Belknap, 400; Carroll, 780; Merrimack, 920; Hillsborough, 980; Cheshire, 780; Sullivan, 580; Grafton, 1,525; Coos, 1,980=9,005. Water area of the State, 300. Total gross area, 9,305 square miles." (For the details of State institutions, see "Annual Cyclopædia," 1881.)

STATE CONVENTIONS.—The Prohibitionists of the State held a convention at Nashua, on June

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7th and 8th. Some weeks prior to the meeting the purpose of the convention was publicly stated to be "to devise some more effective way than the 'spotter system' to suppress the sale of intoxicating liquors." It was also announced that in the local committee of arrangements all parties were represented by their respective adherents as members, and that delegates from all were invited to take part in the convention, which was to be, as it were, "a mass-meeting of temperance men, who desire to confer together concerning the suppression of an evil." At various times during its proceedings, the convention was addressed by a number of prominent citizens, devoted to the interests of prohibition; and the chief result of its deliberations, characterized throughout by earnestness and harmony, was a new constitution, which, without changing the character and purpose of the association, gives it a somewhat different form. Soon after the first meeting of the delegates had been organized, a committee of nine was appointed, with Governor Bell at its head as chairman, and two women among its members, "to prepare a plan for the organization of a State association." This committee, on the second day of the session, reported the following constitution, which was unanimously adopted by the convention:

#### NEW HAMPSHIRE STATE TEMPERANCE UNION.

To promote the cause of temperance, both by moral and legal means; to secure unity and vigor of action among the bodies engaged in promoting this cause, and to aid in diffusing useful information on the subject, by lectures and in print, this constitution is formed.

ARTICLE I. This association shall be known as the New Hampshire State Temperance Union.

ART. II. The officers shall consist of a president and three vice-presidents, a secretary, a treasurer, and an executive committee of fifteen.

ART. III. The president shall preside at all meetings of the Union, and in his absence the vice-presidents in order of election. The secretary shall keep a record of all meetings of the Union; shall attend to the necessary correspondence, and also perform any other duties that shall devolve upon him by action of the Association or Executive Committee. The treasurer shall receive all moneys due the Union, and disburse the same as directed, taking vouchers for all expenditures, and keeping an accurate account of the same. All the officers shall constitute a board of direction, a majority of whom shall constitute a quorum for the transaction of business. They shall meet as often as they may elect, and as often as once in six months. The Executive Board shall adopt such measures for the promotion of the objects of the Union as shall seem to be prudent and effective.

ART. IV. Any person may become a member of the Union by the payment of one dollar or more to the treasurer, and thereby authorizing the secretary to append his name to the constitution.

ART. V. The Executive Board may make all necessary by-laws to carry out this constitution, which shall be subject to revision by the Union at its annual meeting.

The following declaration of principles was subsequently reported from the committee on resolutions, and unanimously adopted:

1. We believe that there is no reform calling for greater exertion and sacrifice than that which seeks to



help men to break away from the bondage of strong drink.

2. We believe there is no cause more just and commanding than that which aims at the extermination of a traffic which is the source of nine tenths of all poverty, misery, and crime.

3. The prohibitory law of this State, now on trial for twenty-five years, while partially inoperative from lack of enforcement in many places, has exerted a wholesome and restraining influence, and its efficiency has been abundantly proved wherever and whenever enforced.

4. The time has come in the history of this reform to declare our firm and unalterable conviction that the duty of enforcing all laws, the prohibitory law included, is incumbent on the police and solicitors, and on the selectmen, and mayor, and aldermen of cities and towns; and the same diligence and impartiality are due from them that the courts have employed in upholding the prohibitory law among the statutes of the State.

5. The reform clubs, temperance unions, and all other organizations that aim to carry out the practical work of the temperance cause, both by moral and legal suasion, should receive the approval and support of all good citizens.

6. That the lavish and corrupt use of money in procuring the nomination and election of civil officers is an alarming and growing evil; is a reproach to the State, turning our politics into a school of corruption, and threatening, unless checked, to undermine popular elections and overwhelm republican government itself; and we call upon the people to rebuke the practice, and wipe out the reproach in every effective way.

7. To secure the enforcement and strengthening of the prohibitory and all other laws of the State, we recommend to the people, especially in the choice of all executive officers and members of the Legislature, that they vigilantly see to the nomination and election of capable, upright, temperate, and independent men.

The following additional resolution was then offered by a delegate, and unanimously adopted by the convention:

*Resolved*, That this convention recommend such legislative action as will insure the use in the public schools of an elementary treatise on alcohol as a poison.

In preparation for the general election in November, 1882, the Republicans of New Hampshire met in State Convention at Concord, on September 12th, to nominate their candidates. Little less than 650 delegates, from all sections of the State, were in attendance. The nominations were as follow:

For Governor, Samuel W. Hale, of Keene; Railroad Commissioners, Edward J. Tenney, of Claremont; Benjamin W. Hoyt, of Epping; and Stillman Humphrey, of Concord.

For members of Congress, by Congressional District Conventions, were nominated: First District, Martin A. Haynes, of Gilford; Second District, Ossian Ray, of Lancaster.

The following among other resolutions were unanimously adopted:

*Resolved*, That the Republicans of New Hampshire reaffirm their faith in those principles which have given liberty, peace, and prosperity to the whole country; while in the untimely death of the late President Garfield, endeared to the nation by his public and private virtues and whose brief service gave promise of a brilliant future, we recognize a great national calamity; we also recognize the patriotism, ability, and fidelity of his successor, and rejoicing in the success of

his administration we tender to President Arthur the assurance of our heartiest confidence and support.

We reaffirm and indorse the principle of a protective tariff as the safeguard of American industries, by which our great manufacturing interests have been fostered and maintained, and American labor has been protected against the ruinous competition of the scantily-paid labor of foreign nations.

We believe in the re-establishment of American commerce, by the encouragement of our shipping and ship-building, and by the enactment of laws discriminating in favor of those interests. We believe, also, in the re-establishment of the American Navy.

We maintain the principle of the prohibition of the traffic in intoxicating drinks, a traffic so disastrous to the best interests of the people, and we demand that all laws for the prohibition of this traffic shall be fearlessly and impartially enforced.

We recognize the great importance of common schools as essential to our national security and prosperity, and we favor national assistance toward the complete establishment of such a system throughout the whole country.

The public revenues have been and are collected economically and faithfully, but we believe that the term of office should be made for a fixed number of years, and legislation should be adopted to make appointments conditioned solely upon fitness.

The Democratic party, represented by about 450 delegates, held its State Convention at Concord on September 13th, and Martin V. B. Edgerly was declared its nominee for Governor.

The following resolutions, with others, were adopted:

The Democrats of New Hampshire in convention assembled, while affirming their adherence to the grand principles of Jefferson, Jackson, Madison, and Douglas, enumerate the following as their platform: . . .

2. We demand the equal taxation of all property, individual and corporate.

3. We advocate the passage and strict enforcement of the anti-bribery bill of General Marston, defeated by the last Republican Legislature.

4. We denounce the present system of blackmailing office-holders, Government clerks, and employés, practiced by the Republicans, to secure corruptive funds for the purchase of votes, and condemn all uses of money, and all other means used for corruption of the ballot at popular elections.

5. We affirm our unalterable opposition to all monopolies, both in State and nation. . . .

7. We believe the present tariff system is unequal and oppressive, and therefore demand its immediate revision, to the end that American industries and labor may be properly protected, without creating and fostering monopolies.

8. We recognize the growing evil of intemperance, and view with alarm the sale of spirituous liquors, in all the cities and larger towns of the State, in open defiance of the law; in view of which facts, we charge the Republican party with cowardly and designedly evading the enforcement of the prohibitory law, and steadily shamming on the temperance question, and record our opposition to all sumptuary laws and our condemnation of that hypocrisy which places a law upon the statute-book, and then evades its enforcement. . . .

11. We charge the Republican party with inaugurating and steadily practicing wholesale bribery at elections for twenty years past, until our elections have become a grand auction, and the offices go to the highest bidder; they have practiced bribery and intimidation of voters until New Hampshire politics are a stench in the nostrils of the whole country; they have used the arm of corporate power in terrifying and controlling the votes of their employés to an extent equal



to the Ku-klux among voters of the South, until the working-men of these corporations know they must vote the Republican ticket or be discharged.

For Congress, George Chandler was nominated in the First District, and — Hosley in the Second.

The result of the general local election, on November 7, 1882, was almost entirely favorable to the Republican nominees. The aggregate vote for Governor numbered 76,218; of which Mr. Hale received 38,399, Mr. Edgerly 36,879, and 840 were scattering.

With reference to the other officers, the Republicans elected the three Railroad Commissioners, both of the two Congressmen, and the first four of the five State Councilors, the Democrats having elected Mr. Aldrich, their nominee for the Fifth District, as Councilor.

The General Assembly at its next session will be divided as follows: Senate of 24 members—Republicans 17, Democrats 7; Lower House, composed of 307 Representatives—Republicans 188, Democrats 114, Independents 3, Greenbackers 2.

**NEW JERSEY. STATE GOVERNMENT.**—The following were the State officers during the year: Governor, George C. Ludlow, Democrat; Secretary of State, Henry C. Kelsey; Treasurer, George M. Wright; Comptroller, Edward J. Anderson; Attorney-General, John P. Stockton; Adjutant-General, William S. Stryker; Chancellor, Theodore Runyon; Vice-Chancellors, Abraham S. Van Fleet and Amzi Dodd; Clerk of Supreme Court, Benjamin F. Lee; Clerk in Chancery, George S. Duryea; Chancery Reporter, John H. Stewart; Law Reporter, Garret D. W. Vroom; State Librarian, James S. McDanolds; State Superintendent of Public Instruction, Ellis A. Apgar; State Geologist, George H. Cook; Chief of Bureau of Statistics, James Bishop; Secretary of the State Board of Health, Ezra M. Hunt, M. D.; Chief Justice of the Supreme Court, Mercer Beasley.

**LEGISLATURE.**—The Legislature met on the 9th of January, and adjourned on the 31st of March. An act to prevent vending, using, or exploding of guns, pistols, toy-pistols, or other fire-arms, to or by persons under the age of fifteen years, makes violations thereof misdemeanors. An act amending the school law provides that an annual meeting for the election of school trustees shall be held in each district on the Tuesday of the week following the annual town meeting; that women shall be eligible as school trustees; and that there shall be an annual census taken in May of all children residing in each district between the ages of five and eighteen. An act was also passed providing for the examination in certain cases of applicants for admission as attorneys to the Supreme Court. Other acts were the following: An act to encourage the establishment of public libraries in any town or municipality in the State, and to provide for taking care of and perpetuating the same; an act to authorize

cities and boroughs to provide by ordinance for the licensing, regulating, restraining, and taxing of auctions and auctioneers; an act to provide for the better protection of the drivers of horse-cars on street passenger-railroads in the cities and towns of the State; an act to provide for the licensing and regulating of milk-dealers and their agents in cities, incorporated boroughs, or police, sanitary, and improvement commissions, and incorporated camp-meeting associations or sea-side resorts; an act to prevent the adulteration and to regulate the sale of milk; an act to regulate fares on horse-cars in cities of the first class (fixing a maximum of five cents); and an act to regulate the sale of petroleum and its products. Another act divides the cities of the State into four classes, viz.: first class, over 100,000 inhabitants; second class, 12,000 to 100,000; third class, all other cities, except sea-side resorts on the Atlantic coast; fourth class, such sea-side resorts. An act was also passed providing that corporations may increase their capital stock to provide means for the payment of bonds that are due or about to become due.

**FINANCES.**—The financial transactions of the State are kept by the Treasurer under four general accounts, viz.: Agricultural College Fund, Library Fund, School Fund, and State Fund.

The income of the *Agricultural College Fund* is entirely derived from the interest on \$116,000 of State bonds, purchased with the proceeds of the sale of lands donated by the General Government. It amounts to \$6,960, and is paid over to the Agricultural College, as designed by the donors of the land.

The *State Library Fund* is small.

The Treasurer includes in the operations of the *School Fund* the amount received by him as the result of the State school-tax, but the whole of this amount is returned to the several counties.

Under the law of 1881, the rate of the school-tax was changed from two mills on the dollar of property to four dollars for each child between five and eighteen years of age. The sum produced was to be paid into the Treasury on the 1st of January; 90 per cent of it was to be returned within ten days to the counties paying it, and the remaining 10 per cent was to be distributed by the State Board of Education, according to their discretion, among the several counties.

The amount produced by this tax and paid into the Treasury during the year 1880 was.....	\$1,922,740 00
And for the preceding year, under the former system.....	1,017,784 88
Increase.....	\$904,955 82

The school-tax for 1882 amounts to \$1,342,656, a further increase of nearly \$20,000.

The assets of the School Fund at the close of the fiscal year embrace railroad stocks and bonds, United States bonds, State and city bonds, bonds of school districts, bonds and mortgages and other items of value, as follow:

Railroad and bank stock .....	\$46,500 00
United States bonds .....	555,000 00
Railroad bonds .....	117,000 00
State and city bonds .....	35,000 00
Bonds of school districts .....	96,100 00
Bonds and mortgages .....	999,508 50
Principal of riparian leases .....	1,124,119 53
Real estate bought at foreclosure .....	82,000 00

Total property of the fund .....	\$3,055,228 03
Interest due on bonds and mortgages .....	52,616 78
Rents due on riparian leases .....	67,118 22
Balance on hand .....	201,764 29

Total property of the fund .....	\$3,376,727 27
Total property, November 1, 1881 .....	2,899,658 00

Increase during the year .....	\$477,069 27
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The receipts of the fund during the year were \$172,427.64.

The disbursements were:

Appropriation to public schools .....	\$100,000 00
Amount invested .....	872,200 00
Premium on United States bonds purchased .....	8,125 00
Cash on hand, October 31, 1882 .....	201,764 29
	\$677,089 29

The assets of the State Fund are as follow:

Stock of the joint companies .....	\$288,700 00
Bonds of the joint companies .....	24,000 00
	\$312,700 00

Besides these there are held Centennial stock (values) .....	74,116 67
County bonds, securing surplus revenue, loaned .....	764,670 44

Total .....	\$1,151,487 11
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The following table presents an exhibit of the receipts and expenditures of the years 1881 and 1882:

RECEIPTS.	1881.	1882.
Tax on corporations .....	\$646,025 98	\$678,455 24
State tax .....	120,564 20	
State-Prison receipts .....	56,611 20	76,032 78
Interest and dividends .....	80,310 00	80,310 00
Judicial fees .....	20,318 21	17,594 12
Official fees .....	2,798 83	11,758 52
Fines of revision .....	880 00	825 00
Fines and forfeited recognizances .....	629 50	4,039 13
Licenses and fees .....	615 00	500 00
Fees returned .....		7,521 29
Sales of ordinance .....		1,489 89
Assessments on private acts .....		50 00
Total receipts .....	\$873,747 87	\$928,525 47
Balance at beginning of year .....	\$84,780 45	167,274 89
Temporary loan .....		250,000 00
Total .....	\$1,268,478 32	\$1,240,799 86
Total disbursements .....	\$1,096,203 98	\$1,104,303 75
Balance at close of year .....	167,274 89	136,496 11
Total .....	\$1,268,478 32	\$1,240,799 86

From these figures it will be observed that the disbursements of the year exceeded the receipts in the sum of \$280,778.28. This excess was met by diminishing the bank balance in the sum of \$30,778.28, and by borrowing \$250,000.

The business of the Riparian Commission during the past year was much more than double that of the preceding year, thus practically evidencing the recognition by the shore owners of the rights of the State in the riparian lands, and their disposition to acquire them for themselves by purchase or lease. These grants

and leases have been made in every county of the State fronting on tide-waters. The lands still in possession of the State are of great value, particularly in the Bay of New York, and in the Hudson and Delaware Rivers. The operations of the commissioners during the year were as follow:

Grants of the fee .....	\$210,152 28
Leases converted into grants .....	83,275 50
Leases made at a rental of 7 per cent. ....	197,820 03

Total .....	\$441,247 86
Received on leases heretofore made .....	65,202 45

Total .....	\$506,450 81
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Besides these, leases and grants amounting to \$40,000 have been agreed upon, but are awaiting the completion of papers. The commissioners, in accordance with the powers vested in them, and in response to applications for increased accommodations for warehousing, shipping, and other commercial pursuits, have established a new exterior line for piers farther out into the river in front of Jersey City.

The following is the valuation of the ratables in the several counties of the State:

	Valuation.
Atlantic .....	\$4,577,238 00
Bergen .....	16,097,571 00
Burlington .....	25,556,143 00
Camden .....	19,217,840 00
Cape May .....	8,528,265 00
Cumberland .....	12,111,000 00
Essex .....	108,494,000 00
Gloucester .....	13,786,260 00
Hudson .....	91,901,996 50
Hunterdon .....	21,067,571 00
Mercer .....	29,890,820 00
Middlesex .....	18,826,000 00
Monmouth .....	27,991,000 00
Morris .....	21,040,447 00
Ocean .....	8,228,998 00
Passaic .....	27,953,845 00
Salem .....	18,896,976 00
Somerset .....	16,300,000 00
Sussex .....	9,969,557 00
Union .....	24,016,100 00
Warren .....	18,762,205 00

Total .....	\$527,451,222 50
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**RAILROAD TAXATION.**—The rate at which railroad property is taxed is, as compared with that which affects that of individuals, very small. The present rate was established by the charters of the companies many years ago, when the success of railroad enterprises was the subject of much doubt and uncertainty, and when it bore a more equal comparison with that of the tax on individuals. While the latter has increased very materially, the former has remained the same. On this subject the Governor says:

I would state that, from the opportunities which I have had and from the facts which have been presented themselves, I am led to believe that the labor of securing information in regard to the value of railroad property is too onerous to be conducted by any officer not specially intrusted with it, and whose time is not wholly at his command for that purpose. The special duties required of the Comptroller in this regard are foreign to the regular work of his office, are a very large addition to it, and are performed without compensation. He is, for these and other reasons, compelled to depend, in a very great degree, upon the statements made to him by the companies, and prevented from securing such accurate information as



would warrant him in rejecting them as being "untrue or insufficient," and yet, until he does this, the statement of the company is required to be taken. This difficulty can be remedied by vesting the power and duty of examining and approving the reports, and the facts upon which they are based, in an officer specially appointed for that purpose. The law doing this should require annual report of the operations of the office to be made to the Governor and Legislature.

If this be done, the proviso of the act of 1876 be repealed, and the Legislature shall itself give such a construction of the words "true value" as will clearly show them to mean the full worth of the enterprise to the company using it, the tax from this source can be very materially increased, as it undoubtedly should be.

**STATE INSTITUTIONS.**—The number of convicts in the State-Prison at the beginning of the year was 803; received during the year, 454; discharged and died, 459; leaving in the prison at the close of the year, 798; being 5 less than at the close of last year. Of this number 32 are females and 766 are males. Contracts have been made, and are now in force, with several parties for the labor of these men. These contracts specify the minimum number which the contractors agree to take and pay for, with the right to use a larger number at the same price. The following table shows, in a condensed form, the several contracts; the number which the contractors agree to pay for, the number employed on each, and the price paid per man per day:

CONTRACT.	Minimum to be paid for.	Number employed.	Price per day.
Shoes .....	100	100	60 cents.
Laundry .....	80	85	50 cents.
Shirts .....	80	95	50 cents.
Collars .....	20	60	50 cents.
Boxes .....	20	20	50 cents.
Whips .....	40	40	50 cents.
Rubber goods .....	30	70	50 cents.
Total .....	870	470	.....

Of the 296 men not actually employed on the several contracts, 41 are used as runners; 20 in the kitchen and laundry; 47 in different trades and employment around the prison and grounds; 64 are crippled, old, and infirm; sick and attendants in hospital, 28; leaving 96 persons capable of labor unemployed.

By the report of the Supervisor, the expense of maintaining the prison during the year was as follows:

Maintenance .....	\$62,502 80
Repairs .....	5,734 83
Paid discharged convicts .....	1,402 00
Salaries of officers and inspectors .....	9,000 00
Salaries of deputies .....	51,073 81
Total .....	\$129,762 94
Earnings of prisoners .....	68,599 67
Net loss to the State .....	\$61,163 27
Net loss of previous year .....	68,888 94

The number of inmates of the Reform School for Boys at the beginning of the year was 266; committed, 180; returned, 23; total, 419; 97 of these were discharged, leaving in the institution at the close of the year, 322, a very marked increase over the number of last year.

The amount of money from the State expended in the maintenance of the school was \$23,076.25; there was derived from the labor of the boys in the shirt-factory, \$14,859.92; from the sale of farm products and miscellaneous sources, \$3,499.22; and from the board of boys, \$589.06. The farm products amounted to nearly \$10,000, an increase over last year of about \$3,600; and over 400,000 bricks were manufactured, nearly 800,000 of which were used in the construction of the new family building, a saving of about \$3,000.

The number of pupils in the Industrial School for Girls at the close of last year was 25; committed during the year, 20; returned to the school, 6; making a total of 51. Of these, 7 were discharged and returned to friends, 10 indentured, and 3 out on trial, leaving at the close of the year 31 inmates. For the support and care of this number, the State has invested in real estate and personal property, as shown by the inventory of the institution, some \$45,000. The cost of maintenance was \$6,151.72, leaving a balance on hand of \$981.55.

The State provides for the care of the insane in its institutions at Morristown and Trenton, and in the county asylums of Burlington, Camden, Cumberland, Essex, Hudson, Passaic, and Salem. Toward the support of these institutions the State pays \$1 per week for each county patient in the several asylums; and \$7 per week for each convict patient in the Trenton Asylum. The counties pay \$3 per week for each patient sent to the State asylums.

The reports of the managers and superintendent of the Trenton Asylum show that there were in the institution at the beginning of the year 577 patients; received during the year, 186; total, 763; of these, 77 were discharged and 57 died, leaving at the close of the year 629 patients. Of these, 504 were county patients, 35 were convict patients, and 90 were private patients, five of the last class being from other States.

The receipts for the year were: From the State for county patients, \$24,264.16; for convict patients, \$13,450.69; from the counties for county patients, \$79,955.68; from private patients, \$24,913.14; from sales of products, etc., \$7,860.14; from rents, \$324; these, with the balance on hand at the beginning of the year, amounted to \$166,584.20. The expenditures were \$151,061.52, leaving a balance on hand at the close of the year of \$15,522.68. The annual inventory shows the property of the institution to be \$108,484.88, a falling off from last year of about \$6,000.

The number of patients in the Morristown Asylum at the beginning of the year was 641; received during the year, 174; discharged, 93; died, 55; remaining at the close of the year, 667. Of these, 524 were county patients and 143 private patients; of the private patients 66 were from other States.

Besides the inmates of the State institutions, there were in the county asylums 746 patients,

divided as follows: Essex, 328; Hudson, 222; Camden, 79; Burlington, 64; Passaic, 36; Cumberland, 10; and Salem, 7. For these the State pays \$1 per week, and the amount paid from the State Treasury during the year was \$37,640.40.

The number of pupils either wholly or partly supported by this State in institutions located in other States, at the close of the year, was 232. Of these, 139 were deaf and dumb, 44 were blind, and 49 were feeble-minded.

**FISHERIES.**—It appears, from a census report of the commercial fisheries of the United States, that New Jersey produced in 1880 \$3,176,589 worth of fishery products, taking the sixth place in the list of fish-producing States. In some of the special fisheries it takes a higher rank. Its oyster products, valued at \$2,030,625, are exceeded only by those of Maryland and of Virginia. Its crab-fisheries, from which the fishermen realize \$162,612, are more extensive than those of any other State, while its quahaug (hard-clam) fisheries are second only to those of New York. In the menhaden-fisheries it stands fifth on the list, the oil, scrap, and compost produced in 1880 being valued at \$146,286. Its river-fisheries are of minor importance, the total yield being only 2,752,000 pounds, netting the fishermen \$91,435.

**EDUCATION.**—The report of the State Superintendent shows a steady improvement in school matters. The school-tax produced very considerably more than in the previous year; the surplus revenue over \$3,000 more; and the amount raised by district tax for teachers' salaries and maintaining the schools is over \$23,000 more.

**ELECTION RETURNS.**—Members of Congress and of the Legislature were elected in November. Republicans were elected in the second, third, fourth, and fifth congressional districts, and Democrats in the first, sixth, and seventh. The following list shows the composition of the districts and the vote:

## FIRST DISTRICT.

COUNTIES.	Ferrell, Democrat.	Robeson, Republican.	Bristol, Greenback.	Woolman, Prohibition.
Camden.....	5,887	5,387	24	282
Capo May.....	1,044	923	65	59
Cumberland.....	3,939	3,036	411	352
Gloucester.....	2,964	2,897	120	76
Salem.....	2,727	2,577	64	174
Majority.....	16,541	14,825	684	943

## SECOND DISTRICT.

COUNTIES.	Parker, Democrat.	Brewer, Republican.	Howland, Greenback.
Atlantic.....	1,609	2,089	82
Burlington.....	6,068	5,651	126
Mercer.....	5,765	1,636	...
Ocean.....	1,093	1,723	44
Majority.....	14,535	15,604	270

## THIRD DISTRICT.

COUNTIES.	Ross, Democrat.	Kean, Republican.	Urner, Greenback.
Middlesex.....	4,634	5,709	298
Monmouth.....	5,540	4,455	1,053
Union.....	2,717	5,022	2,107
Majority.....	21,891	15,186	3,463

## FOURTH DISTRICT.

COUNTIES.	Harris, Democrat.	Howey, Republican.	Larison, Greenback.
Hunterdon.....	2,717	2,987	467
Somerset.....	2,126	2,767	71
Sussex.....	2,737	2,484	121
Warren.....	3,365	3,329	219
Majority.....	10,945	11,567	873

## FIFTH DISTRICT.

COUNTIES.	Ryle, Democrat.	Phelps, Republican.	Potter, Greenback.	McCormick, Prohibition.
Bergen.....	3,175	3,397	23	77
Morris.....	3,795	4,632	279	660
Passaic.....	5,733	6,372	85	291
Majority.....	12,708	14,841	387	1,023

## SIXTH DISTRICT.

COUNTY.	Fiedler, Democrat.	Blake, Republican.	Hook, License.
Essex.....	17,200	14,780	363
Majority.....	2,420		

## SEVENTH DISTRICT.

COUNTY.	McAdoo, Democrat.	Collins, Republican.
Hudson.....	15,147	11,566
Majority.....	3,581	

The total vote was as follows: Democratic, 99,962; Republican, 97,869; Labor and Greenback, 6,032; Prohibition, 1,971; Democratic plurality, 2,093. The Legislature, to meet in January, 1883, will be constituted as follows:

	Senate.	House.
Republicans.....	12	25
Democrats.....	9	35

**NEW YORK.** When the New York Legislature met on the 3d of January, it was composed of 17 Democrats and 15 Republicans in the Senate, and 67 Democrats and 61 Republicans in the Assembly, but the political control was neutralized by a division among the Democrats. Three of the Senators and six of the Assemblymen from New York city had been elected as Tammany candidates against the so-called "regular" or "County Democracy" nominees. Two other Assemblymen, also allied with Tammany, acted with the six "straight" Tammany men. In the State canvass of 1881 the Tammany delegates from New York city had been ruled out of the State Convention, and that association



had taken an independent course in regard to local officers. Holding the balance of power in the Legislature, it seemed disposed to use its advantage in order to make terms with the leaders of the regular Democracy. The Tammany Representatives declined to take part in the caucuses by which candidates for offices in the two Houses were nominated at the beginning of the session. The Democrats named John C. Jacobs, of Kings County, as their candidate for President of the Senate, and Charles E. Patterson, of Rensselaer, for Speaker of the Assembly, but the Tammany men refused to support them. The Republicans nominated Thomas G. Alvord, of Onondaga, for Speaker, the Lieutenant-Governor being the presiding officer of the Senate. In advance of the nominations, representatives of the Tammany organization had made certain demands as the price of its co-operation with the Democrats. Among these were the chairmanship of the Committees on Cities in both Houses, a satisfactory composition of the Committees on Railroads and on Commerce and Navigation, a share in the subordinate offices, and a pledge excluding Jacobs from the chair of the Senate. These demands not being complied with, the Tammany members persisted for several weeks in opposition to the Democratic efforts to organize the two Houses.

The Senate had a presiding officer in the person of the Lieutenant-Governor, and was able to proceed with business, although the election of a Clerk was impossible, and there were no standing committees; but the Assembly could do nothing until organized, the Clerk of the former Assembly presiding from day to day. In the ballots for Speaker the Tammany members cast their votes for J. J. Costello, of New York. The struggle over the organization was interrupted on the 16th of January by proceedings in honor of Senator Webster Wagner, who had been killed in an accident on the New York Central and Hudson River Railroad near Spynen Duyvil. The Governor made this accident the occasion for a special message recommending more rigid requirements for the protection of passengers on railroad trains, and an act for that purpose was subsequently passed. Pending the organization an effort was made by the Republicans of the Senate to secure a modification of the rules, which should give the presiding officer the power to appoint standing committees. This power had been taken from the Lieutenant-Governor and given to a president *pro tem.* at a time when the former was a Democrat and the majority in the Senate was Republican. In the Assembly an effort was made to secure the adoption of a resolution appointing Charles E. Patterson temporary Speaker. Both of these expedients were unsuccessful. On the 25th of January there was a conference of the Democratic members of the Assembly, but as one of the demands of the Tammany men was that Patterson should be withdrawn as a candidate for Speaker and

the selection made from five names to be presented by them, it resulted in nothing. Other fruitless conferences and caucuses followed, but finally, on the 2d of February, Patterson was elected Speaker, the Tammany members having been induced to vote for him by concessions, said to include the control of the Committees on Cities and on Railroads. The final vote was 59 for Patterson and 51 for Alvord. The next day 58 bills were introduced in the Assembly, including one by C. S. Baker, of Monroe County, for the establishment of a Railroad Commission, and one by Mr. Sheehy, of New York, compelling the elevated railroads of that city to reduce their fare to five cents. A new difficulty arose before the list of committees was presented by the Speaker. The Tammany men grew distrustful and withdrew from a caucus called for the purpose of revising the nominations for subordinate offices and refused to support the candidates. This produced another dead-lock on the election of a Clerk. Meantime in the Senate it had been proposed to get along without committees, referring all bills to the Committee of the Whole; also to select one Democrat and one Republican member, who should, in conjunction with the Lieutenant-Governor, arrange the committees; but neither of these plans obtained sufficient support. The Speaker of the Assembly presented the list of standing committees on the 14th of February, and it served to intensify the dissatisfaction of the Tammany members. They not only complained of the composition of the important committees, but declared that distinct pledges had been violated. They showed their resentment next day by voting for the Republican candidate for Clerk and assisting to elect him. On the same day the Tammany Senators voted with the Republicans to modify the rules and permit the Lieutenant-Governor to appoint the committees. This action was speedily followed by a completion of the organization of the two Houses by the co-operation of the Republicans and Tammany Democrats. Charges of a political bargain between them were freely made, and Governor Cornell and Mr. John Kelly were credited with an understanding through which it was effected. These accusations were denied by both Republicans and Tammany men. It was the 25th of February before the work of legislation was begun in earnest, and it was still somewhat embarrassed by the peculiar division of the two Houses and the independent attitude of the Tammany Democrats, who held the balance of power.

The session continued until the 2d of June. There were 1,222 bills introduced in the Assembly and 735 in the Senate, and the number which passed both Houses was about 800. One of the most important subjects dealt with was that providing for the regulation and supervision of railroads. The bill introduced in the Assembly by Mr. Baker, of Monroe, for this purpose, was substantially the commission bill



of the Hepburn Committee, reported in 1880. It provided for the appointment of three commissioners by the Governor, by and with the advice and consent of the Senate, and defined their powers. The bill was kept in the hands of the Railroad Committee without action until the 23d of March, when, on motion of Mr. Baker, it was taken from the committee to be considered by the House. The opposition was then directed against the provision giving the Governor the power to appoint the commissioners, and a long political wrangle ensued. Mr. Armstrong, a Republican, proposed an amendment naming the commissioners in the bill. Mr. Haggerty, a Tammany representative, proposed that there should be four commissioners, and that the Governor be required to take two from each political party. Another proposition was to postpone the selection until January, 1883, in order that the existing Governor might not exercise the power of appointment. Then Mr. Haggerty modified his amendment, so that it provides for three commissioners, to be appointed by the Governor, one of whom "shall be selected from the party which cast at the last general election the greatest number of votes for Secretary of State"; one "from the party which cast at the last general election the next greatest number of votes for Secretary of State, one of whom shall be experienced in railroad business"; and one "upon the recommendation of the presidents and executive committees, or a majority of such, of the Chamber of Commerce of the State of New York, the New York Board of Trade and Transportation, and the National Anti-Monopoly League of New York, or any two of such organizations so represented, in case of disagreement." Following this was a substitute proposed by Mr. Welch, Democrat, that the commissioners be elected by the people. On the 6th of April the bill was ordered to a third reading, all amendments affecting appointments having thus far been defeated, by a vote of 69 to 55. When the bill finally passed the Assembly, on the 19th of April, however, it was with the amendment making the commissioners elective. This was adopted by a vote of 66 to 57, and the bill then passed, 106 to 15. When it was reported in the Senate, it was with a change embodying the Haggerty proposition in regard to the appointment of commissioners. A proposition to restore the Assembly provision was defeated, 13 to 14; a motion to give the Governor an untrammelled choice was lost, 9 to 14; an effort to have the commissioners named in the bill failed, and for some time final action was prevented by the refusal of the Democratic Senators to vote. The opposition was based mainly on political objections to giving Governor Cornell the power to name the commissioners at all. Finally, after a long struggle, in which the various propositions were repeatedly voted on, an amendment retaining the Haggerty, or anti-monopoly, method of appointment, but

postponing the exercise of the appointing power until a new Governor had been chosen, was agreed to, and the bill passed both Houses in that form on the 25th of May. In the Senate there was but one dissenting voice on the first vote, that of McCarthy, of Syracuse, and in the Assembly the vote was 75 to 39. Efforts were made to secure a veto of the bill, but it was signed by the Governor.

The powers given to the Railroad Commission were chiefly those of inquiry and supervision, all enforcements of law having to be effected through the action of the Attorney-General. Its main purpose was to secure publicity, the investigation of all complaints, and full reports to the Legislature. The Commissioners receive \$8,000 a year each, and have allowances for assistance and expenses. The yearly cost, which must not exceed \$50,000, is to be borne by the railroad companies; one half in proportion to net income, and one half in proportion to length of main track.

A bill which attracted a good deal of attention was one providing that the elevated railroad companies of New York city should, in lieu of other public charges, pay a tax of 4 per cent on their gross receipts, and relieving them of a large amount of taxes already due, though disputed, on their property. The bill, as first submitted, was understood to have the approval of the Mayor and Comptroller of the city; but it was materially modified, and they not only withdrew their approval, but earnestly opposed its passage, on the ground that it unjustly discriminated in favor of these particular corporations, and deprived the city of a large amount of revenue rightly due to it. After the bill had passed both Houses, several members professed to have voted for it under a misapprehension, and a resolution recalling it from the Governor passed the Senate, but was defeated in the Assembly. The bill was vetoed by the Governor after the close of the session, although the companies made strenuous efforts to induce him to sign it, ex-Senator Conkling acting as their attorney in the matter. Another bill that attracted considerable attention was a general act providing for the construction of street surface railways. It was claimed that it covered certain schemes for street railways in the city of New York, without providing sufficiently for the protection of public and private interests. This bill also passed, and was vetoed by the Governor after the close of the session. A bill compelling the elevated railroad companies to reduce their fares to five cents passed the Senate early in the session, but action upon it was prevented by its opponents in the Assembly.

Among the bills passed was one for the regulation of primary elections, but it was so limited as to apply only to the city of Brooklyn. It contains stringent provisions against fraudulent voting and false counting in primary elections, and empowered inspectors at such elections to



administer an oath to persons offering to vote, as to their qualifications, in case they are challenged. Violators of the law are subject to penalties of fine not exceeding \$3,000 and imprisonment not exceeding three years. Primary elections are defined as embracing "all elections held by any political party, convention, organization, or association, or delegates therefrom, for the purpose of choosing candidates for office, or the election of delegates to other conventions, or for the purpose of electing officers of any political party, organization, convention, or association." Qualifications of voters at such elections are left to be "prescribed by the association holding the primary or convention." A bill was passed providing that in New York city one alderman should be elected in each Assembly district, and one from the city at large, who should be the president of the board.

A joint resolution, submitting to a vote of the people the amendment of the Constitution abolishing tolls on the canals, and providing for their support by taxation, passed the Senate by a vote of 22 to 10, and the Assembly by a vote of 74 to 44. The following is the text of the amendment affecting the third, fifth, and sixth sections of Article VII:

SECTION 3. The first and second sections of this article having been fully complied with, no tolls shall hereafter be imposed on persons or property transported on the canals, but all boats navigating the canals, and the owners and masters thereof, shall be subject to such laws and regulations as have been or may hereafter be enacted, concerning the navigation of the canals. The Legislature shall annually, by equitable taxes, make provision for the expenses of the superintendence and repairs of the canals. The canal debt contracted under the section hereby amended, which on the first day of October, eighteen hundred and eighty, amounted to eight million nine hundred and eighty-two thousand two hundred dollars, shall continue to be known as the "canal debt, under Article VII, section 3, of the Constitution"; and the sinking fund applicable to the payment thereof, together with the contributions to be made thereto, shall continue to be known as the "canal debt sinking fund," and the principal and interest of said debt shall be met as provided in the fifth section of this article. All contracts for work or materials on any canals shall be made with the person who shall offer to do or provide the same at the lowest price, with adequate security for their performance. No extra compensation shall be made to any contractor; but if, from any unforeseen cause, the terms of any contract shall prove to be unjust and oppressive, the Canal Board may, upon the application of the contractor, cancel such contract.

SEC. 5. There shall annually be imposed and levied a tax which shall be sufficient to pay the interest and extinguish the principal of the canal debt mentioned in the third section of this article, as the same shall become due and payable, and the proceeds of such tax shall, in each fiscal year, be appropriated and set apart for the sinking fund constituted for the payment of the principal and the interest of the aforesaid debt. But the Legislature may, in its discretion, impose for the fiscal year, beginning on the first day of October, eighteen hundred and eighty-three, a State tax on each dollar of the valuation of the property in this State, which may by law then be subject to taxation, sufficient, with the accumulations of the sinking fund applicable thereto, to pay in full both the principal and interest of the canal debt before mentioned, and

the proceeds of such tax shall be appropriated and set apart for the sinking fund constituted for the payment of the principal and the interest of said debt. In the event of such action by the Legislature, then the Legislature shall, under the law directing the assessment and levy of such tax, make such provision for the retirement of the canal debt as it shall deem equitable and just to the creditors of the State.

SEC. 6. The Legislature shall not sell, lease, or otherwise dispose of the Erie Canal, the Oswego Canal, the Champlain Canal, the Cayuga and Seneca Canal, or the Black River Canal, but they shall remain the property of the State and under its management forever. All funds that may be derived from any lease, sale, or other disposition of any canal shall be applied in payment of the canal debt mentioned in the third section of this article.

An amendment was also submitted authorizing an increase of the judicial force of the Supreme Court, in the following terms:

SECTION 28. The Legislature, at the first session thereof, after the adoption of this amendment, shall provide for organizing in the Supreme Court not more than five general terms thereof; and for the election at the general election next after the adoption of this amendment, by the electors of the judicial districts mentioned in this section, respectively, of not more than two Justices of the Supreme Court, in addition to the justices of that court now in office in the first, fifth, seventh, and eighth, and not more than one justice of that court in the second, third, fourth, and sixth judicial districts. The justices so elected shall be invested with their offices on the first Monday of June next after their election.

A joint resolution proposing a constitutional amendment guaranteeing the right of local self-government to cities passed both Houses. Amendments in favor of woman suffrage and prohibition of the liquor-traffic were defeated. A bill conferring the right of suffrage on women was defeated on its third reading, the Attorney-General having given it as his opinion that the right could not constitutionally be conferred by the Legislature. A bill was passed allowing the closing address in criminal trials to the defense, and was approved by the Attorney-General, who gave his opinion, at the request of the Governor, but it was nevertheless vetoed. The interest law was so modified as to permit advances of money to an amount not less than \$5,000, repayable on demand, and secured by negotiable instruments as collateral, at rates to be agreed upon in writing between the parties. In effect, it removed the application of the usury law from "call loans." No serious effort was made to pass a bill apportioning the congressional representation of the State by new districts. A bill requiring telegraph wires to be laid underground in cities was defeated. An appropriation of \$1,000,000 to complete the Capitol was made, and \$1,250,000 for the completion of the East River Bridge was authorized. After considerable controversy, \$200,000 was appropriated to continue the work of the Emigration Commission of New York city. This was signed after the close of the session, on the understanding that funds should not be drawn from the appropriation by the commissioners after the bill pending in Congress providing for a head-money tax should pass.



An unusual number of investigations were set on foot, some of which were to continue during the recess. Among the latter was one regarding the effect of dealing in "futures" and getting up "corners" in grain, provisions, etc., and one affecting the administration of the Department of Public Works in New York city. There were two investigations of alleged abuses in the management of receiverships of insolvent insurance companies—one made by the Senate and the other by the Assembly. The former was conducted by the regular Insurance Committee of the Senate, and was continued during the recess. In the Assembly, it was proposed at first to place the investigation in the hands of the Committee on Insurance, but, as there were some indications of a purpose to smother the inquiry, it was promptly taken from that body and placed in the hands of a special committee, of which Mr. Chapin, of Kings County, was the chairman, and Major Haggerty, of New York, proved to be an active and zealous member. The report of this committee was submitted about two weeks before the end of the session. The principal charges had been that there were unnecessary delay, inordinate expenses, and general laxity of management in closing up the affairs of insolvent insurance companies and savings-banks. These were fully sustained by the investigation. Among other features of the committee's report were a review and condemnation of the course of Judge T. R. Westbrook, of the Supreme Court, who, as was alleged, had made several appointments of receivers and granted many of the orders under which their extravagant and inefficient proceedings had taken place. Many facts and details were presented in the report, and legislation was recommended. Several acts were considered, some of which had been introduced into one House or the other, before the committee's report was made. One of these, submitted in the Assembly by Mr. Sharpe, of Ulster, and providing for the general charge of the winding up of insolvent corporations by the State Treasurer, with the legal aid of the Attorney-General, passed both Houses, but was vetoed by the Governor after the close of the session.

Another important investigation was set on foot in the Assembly by the following resolution, offered by Mr. Roosevelt, of New York:

*Whereas*, Charges have been made from time to time by the public press against the late Attorney-General, Hamilton Ward, and T. R. Westbrook, a Justice of the Supreme Court of this State, on account of their official conduct in relation to suits brought against the Manhattan Railway; and

*Whereas*, Those charges have, in the opinion of many persons, never been explained or fairly refuted; and

*Whereas*, It is of vital importance that the judiciary of this State should be beyond reproach: therefore—

*Resolved*, That the Judiciary Committee be and it is hereby empowered and directed to investigate the conduct of the late Attorney-General, Hamilton Ward, and Justice T. R. Westbrook, in relation to the suits

against the Manhattan Elevated Railroad, and report at the earliest day practicable to this Legislature.

This resolution was strenuously opposed by the friends of Judge Westbrook, but was adopted on the 12th of April by a vote of 99 to 14. There was some delay in beginning the investigation, and at the request of the committee it was allowed the assistance of counsel, Mr. Albertis Perry, of Oswego, and Mr. F. L. Stetson, of New York, being selected for the purpose. The inquiry was conducted in part at Albany and in part in the city of New York. Efforts were made to secure a final adjournment of the Legislature before the investigation was finished, but it was defeated. The committee made its report on the 31st of May. The majority, after reviewing the evidence, presented their conclusion in the following resolution:

*Resolved*, That Theodoric R. Westbrook, a Justice of the Supreme Court of this State, has not, upon the evidence submitted to the Judiciary Committee of this House, been guilty of any impeachable offense.

In justifying this conclusion, the signers of the report, consisting of W. A. Ponder, chairman of the committee, F. B. Smith, Amasa J. Parker, Jr., O. S. Searl, James D. McClelland, and D. S. Potter, said:

The statutory description of impeachable offenses is "mal and corrupt conduct in office and high crimes and misdemeanors (1 R. S. [fifth ed.], 456). The term "mal and corrupt conduct in office," as defined by Judge Grover in the case of a judicial officer, consists of "an intentional violation of duty to the prejudice of public justice, or a reckless exercise of his functions, indifferent as to whether what was done was right or wrong." Applying this test to the judicial conduct of Judge Westbrook, as disclosed by the evidence before them, your committee have come to the conclusion that, although in some instances his actions have been indiscreet and unwise, yet there is nothing in that conduct which affords ground for impeachment. The committee have discussed at some length the merits of orders for the granting of which it is urged that Judge Westbrook should be impeached. They have done this in order to ascertain, if possible, whether or not the judge was actuated by unworthy or improper motives in granting such orders, and not because they deemed it within their province to review his errors, whether of fact or of law. Every lawyer knows that almost daily orders are made and judgments given, which, on review by the judge himself or an appellant tribunal, are vacated, modified, or reversed as being improvident, irregular, or illegal. Tribunals are especially established by the Constitution and laws for the correction of such errors, and it would be a dangerous precedent for a legislative committee to assume this prerogative and condemn a judge for his mistakes, omissions, or inadvertencies. Under such a system, and tried by the standard which has been urged upon the committee in this case, there is not a judge in the State who would be safe from impeachment. The private character of Judge Westbrook is without a stain. His industry and ability are shown by his numerous opinions recorded in the reports, by the united voice of the bar of the Third Judicial District, and the testimony in this case. Before recommending the impeachment of such a judge, your committee have deemed it their duty to require that specific acts of mal and corrupt conduct on his part should be established, not by hearsay, or surmises, or fanciful inferences, but by legal and convincing evidence. In the opinion of your committee that has not been done.



A minority of the committee, consisting of Alfred C. Chapin, of Brooklyn, and James E. Morrison, of New York, recommended impeachment "for mal and corrupt conduct in office." In their brief report they said:

The undersigned do not consider that, on all the evidence, a resolution of removal would be justifiable. It seems to us clear, however, that a *prima facie* case has been established, and that upon all the evidence adduced the said justice should be put upon his trial. Until the charges made before your Judiciary Committee are met by better and clearer explanations than have been offered thus far, the said justice should not continue to exercise the duties of his office.

In our judgment the committee's duty is limited to ascertaining and declaring whether or no Justice Westbrook is liable to removal or impeachment. Censure by implication or by direct resolution is not among the powers of the Assembly. Morally, such censure may perhaps carry the same weight as would similar declarations from any other body of equal numbers. Legally no such right exists. These are not censurable offenses. The different departments of government are not subject to each other's control or suspension, unless by virtue of some express enactment. We shall, therefore, refrain from addressing any didactic remarks to this justice or to the judiciary of our State. We desire to correct a wide-spread and dangerous misapprehension prevailing as to the scope and nature of the judicial misbehavior which justifies impeachment. A Justice of the Supreme Court is chosen for fourteen years. The office is one of emolument and high honor. He may be impeached for high crimes and misdemeanors, and also for mal and corrupt conduct in office. We must exclude both high crimes and misdemeanors, and in defining mal-conduct we must attend solely to such offenses as are neither high crimes nor misdemeanors, and which do not necessarily constitute corrupt conduct.

Mr. Robert A. Livingston, of the committee, concurred in the minority report, but recommended impeachment for "mal-conduct" only, the evidence in his opinion not showing "corrupt or dishonest motives." Messrs. Worth, Chamberlain, and Robert Armstrong, Jr., united in a statement of dissent from many of the "statements and conclusions of fact" in the majority report, but of concurrence in the recommendation that the judge be not impeached. Action on the reports excited warm discussion in the Assembly. Mr. Roosevelt moved the adoption of the minority report of Messrs. Chapin and Morrison, but the motion was defeated—yeas 27, nays 84, not voting 17. The majority report was adopted by a vote of 77 to 35, 11 members not voting. Charges were not wanting to the effect that the railroad power and influence were instrumental in securing this result of the investigation.

The veto-power of the Governor was very freely exercised during the session, and a large number of measures which passed both Houses were defeated after adjournment by a failure to receive the Executive approval. Among the acts vetoed after the adjournment was the Civil Code, one of a series of codifications of the laws of the State prepared under the direction of Mr. D. D. Field; the Military Code; the Sharpe Receivership Bill; and the acts already mentioned regarding the taxation of elevated railroads and the chartering of surface street-

railways. Items in the annual "Supply Bill," amounting in the aggregate to \$326,863.84, were also vetoed on a variety of grounds.

The political canvass of the year may be said to have begun early in the session of the Legislature. The charge that the Governor had a political understanding with the Tammany forces in that body, through which the "dead-lock" upon the organization of the two Houses was broken, whether true or not, was not without influence. The election of a Democrat to succeed Senator Wagner from the Saratoga District was generally interpreted as indicating Republican dissatisfaction. About the same time Isaac V. Baker, Jr., was appointed Superintendent of State-Prisons, to succeed Louis F. Pilsbury. The appointment was at the time very generally regarded as a political one, intended to promote the renomination of Governor Cornell. It was confirmed by the Senate with the aid of Tammany votes. It was this incident which largely influenced the opposition afterward made to giving Governor Cornell the power to appoint the members of the proposed Railroad Commission, and led to restrictions upon the appointing power in the act establishing the commission, and the postponement of its operation until 1883. The vetoing of the bill regarding the taxation of elevated railroads in opposition to the arguments of ex-Senator Conkling, who acted as counsel for the companies, was also believed to have an effect on the Governor's chances for a renomination, which he was avowedly seeking. Mr. Conkling was credited with having great influence with the national Administration and with some of the political managers of his party in the State, and it soon became evident that that influence would be exerted against Governor Cornell's renomination. As early as the month of March the Hon. Charles J. Folger, Secretary of the national Treasury, began to be talked of as an "Administration candidate" for Governor of New York. During the summer it became evident that the Governor's canvass for a renomination and the efforts to defeat it by his enemies, represented by the Conkling faction, were threatening the Republican party with a serious division. On the 20th of August a Republican newspaper published at Albany distinctly declared, on what was afterward avowed to be the Governor's authority, that Mr. Conkling was working to defeat Mr. Cornell's renomination, chiefly from resentment at his action in vetoing measures in which the ex-Senator was interested as the representative of great corporations. From that time the contest in the party was clearly defined. The supporters of the Governor labored openly for his renomination, and it soon became apparent that the so-called "Stalwarts" and "machine Republicans" were against him, and had the sympathy of the Administration at Washington. It was also the avowed purpose of the latter to make Secretary Folger the candidate



for Governor. There was a compromise element of the party which favored the nomination of some men not identified with the faction contest, and with them the favorite for the nomination was General James W. Wadsworth.

The Republican State Committee held a meeting in New York city on the 2d of August, to determine on the time and place of holding the State Convention. The friends of Governor Cornell were in favor of an early convention, September 5th being the date preferred by them, but it was decided by a vote of 18 to 14 to hold the convention on the 20th of September. This was taken as indicating the strength of the Governor with the State Committee. It was decided to hold the convention at Saratoga, the vote being 17 for that place, 12 for Syracuse, and 3 for Rochester. The committee voted unanimously to refund to N. M. Curtis the \$1,000 fine and his expenses in defending himself in the prosecution for collecting political contributions from public employes, in case he should finally be compelled to pay.

The Anti-Monopoly organization displayed considerable political activity during the year, but exerted its influence without making nominations. It held conferences at Albany during the session of the Legislature, chiefly for the purpose of influencing action on the Railroad Commission Bill, and the act as passed had its approval. A meeting was held in New York near the middle of August, at which a State Committee was organized, and a call issued for a State Convention to be held at Saratoga on the 13th of September.

Early in August efforts were made through conferences and committees to secure the co-operation in the approaching canvass of the three Democratic factions of New York city known as Tammany Hall, Irving Hall, and the County Democracy. The Democratic State Committee met at Saratoga on the 8th of August, and decided to have the State Convention held at Syracuse on the 21st of September. The following resolution in the interest of harmony was adopted by the committee:

*Resolved*, That while this committee neither possesses nor will attempt to exercise any control over the methods by which delegates to the ensuing State Convention may be chosen in any Assembly district of this State, and while it recognizes the supreme power of the convention to pass upon the title of delegates to seats therein, we nevertheless express our earnest desire that but one delegation, and that fully representative in character, may be sent to such convention to represent each Assembly district of the State. We, therefore, respectfully appeal to all men in the State professing to be Democrats, or sympathizing with our purposes, and desiring victory in the election, to use all honorable means to secure such result. To this end we respectfully advise that such electors unite in the same primaries or caucuses at a place and time to be designated by the Assembly district organization whose delegates were recognized by and admitted to the State Convention of 1881, and that the caucuses or primaries thus convened shall select their own officers and appoint their own tellers of election by the vote of the electors there assembled.

The following was also embodied in the call for the convention:

The Democratic electors of the State of New York, and all others who desire to co-operate in a determined effort, at the ensuing election, to reform the public service, and protect the people against the encroachments of those who are using public franchises as if they were only private rights; and all citizens who are opposed to the unparalleled prodigality of the Republican party, and to the continuance of the present enormous and unnecessary taxation of the labor and business of the country, are requested to choose three delegates from each Assembly district to represent them in a State Convention, to be held at Albany on the 21st of September next, at twelve o'clock, noon, for the purpose of nominating candidates for State offices to be filled at the next election, and to transact such other business as may properly come before the convention.

The first political convention actually held was that of the Greenback-Labor party, which took place at Albany on the 19th of July. Epenetus Howe, of Tompkins County, was nominated for Governor; James Allen, of Kings, for Lieutenant-Governor; L. J. McParlin for Judge of the Court of Appeals; and L. G. McDonald, of Glens Falls, for Congressman-at-large. A platform was adopted reaffirming the principles of the party, condemning the penal code and the system of contract labor in prisons, demanding the election of all public officers, including postmasters, and favoring local self-government for all communities. It also contained the following declarations:

That all railroad and telegraph companies doing business under the laws of this State, and which have forfeited their chartered privileges as common carriers by failing to provide suitable and speedy facilities for transacting their business, should immediately be taken possession of by the State, and operated for the benefit of the people. That all persons employed by such corporations should be liberally, justly, and promptly paid for their services, and that any interruption to business, resulting from failure on their part to pay their operatives such rates, should deprive such corporations of their chartered privileges. That the stock and bonds of all railroad and telegraph companies should be limited to the actual cost of construction and equipment. That any burden imposed on commerce or travel to pay interest or dividends on any excess of that amount is in violation of the fundamental law of public use which permits legislative sanction authorizing the construction of railroads and telegraphs. That no discriminating rates between individuals or communities should be allowed. That the books of the companies representing such property should be open to public inspection, and that commissioners should be elected by the people to carry out these provisions.

That incorporate capital which now holds absolute control over the money, the highways, the public lands, and the legislation of this State and country, should be restricted in its power to purchase or control large tracts of land; and, as this is a question of special interest to farmers—as a matter of protection to them—we demand that all land owned by individuals or corporations in excess of what is required for their personal use, or for the transaction of their business, should be taxed so as to render its ownership valueless.

A Labor Convention was held at Buffalo on the 12th of September, but no nominations were made. The resolutions adopted demand-



ed the abolition of contract labor in prisons; the abolition of tenement cigar-factories; factory inspection so as to permit no child under fourteen years of age to be employed; the enforcement of the compulsory educational act; and the reduction of the hours of labor to ten hours a day in all the factories of the State; the establishment of a Bureau of Labor Statistics, to be managed by officers appointed upon the recommendation of the State labor organization; the repeal of the sections of the penal code that aim to prevent the lawful assembling of working men and women; the establishment of a printing-office for the State documents instead of letting the same out by contract; the enactment of an employers' liabilities act, making the employers responsible for accidents occasioned through the carelessness of employes; a law giving mechanics and laborers first lien for labor performed; that all employers of labor pay cash weekly, in lawful money, for labor performed.

The Anti-Monopoly Convention took place at Saratoga on the following day. No nominations were made, but a platform of extraordinary length was adopted. Among the more practical propositions which it contained were the following:

3. Corporations have the right to make charges for service which, without favoritism or unjust discrimination, will pay the expense of their economical administration and reasonable dividends on the capital actually invested, but commissioners should be provided to supervise and control them. When they conform to the law and the objects of their creation, they are entitled to efficient protection.

4. Canals, rivers, and water-ways of the country should be constantly and efficiently maintained free of tolls.

5. The Federal Government should own the telegraph lines, and operate them as a part of the postal system, establishing a tariff of rates limited to the cost of maintenance and transmission.

6. Savings-banks should be established in connection with the Post-Office Department, in which the poor can safely deposit their earnings.

7. The currency issued to the national banks should be retired. All currency, whether metallic or paper, should be issued and controlled by the Government only, and be redeemable in gold and silver.

8. The lavish grants to railroads should be discontinued, and those which have been forfeited by reason of non-compliance with the terms of the grants should be restored to the national domain.

9. Combinations to inflate or depress prices, without regard to value, are immoral and wicked, and should be prohibited by law.

10. The penal code should be amended and objectionable sections repealed; a labor bureau should be added to the State departments, to collect statistics and procure information, and make reports and recommendations to the Legislature for the benefit of protection of labor, with adequate powers in cases of public emergency to arbitrate and arrange questions arising between laborers and corporations, and where laborers are employed by public corporations to establish and alter the wages to be paid.

12. State-prisons and penitentiaries are established to prevent crime and to reform criminals, not to make profits for private persons, or to injure the interests of labor. Therefore, the contract system in these institutions should be abolished, and the labor of the convicts be so employed as not to injure the interests of merchants and laboring-men.

14. The civil service must be divorced from politics and reformed. Honesty and efficiency must be made the conditions upon which subordinate offices may be secured or retained.

15. Women have the same inalienable right as men. Taxation without representation is odious. There is no sufficient reason why men should monopolize the ballot. Therefore, men and women should be equal before the law. Women should have equal pay with men for equal work, and if they desire to vote they should be allowed to exercise that right.

16. The present demand of the people is the election of a Governor and a Legislature which will carry into execution the Railroad Commission Bill, abolish free passes on railroads, reform the laws of assessment and taxation, and establish labor bureaus, with sufficient power to protect labor. Therefore, it is the duty of every anti-monopolist and anti-monopoly league to ascertain whether the candidates of existing parties will favor these necessary reforms as soon as they are nominated, and, if they will not, to see that a candidate is nominated and elected who will obey the voice of the people.

On the morning of September 20th, previous to the assembling of the Republican State Convention at Saratoga, there was a meeting of the State Committee, at which thirty-two of the thirty-three members were present, or represented by proxy. Stephen B. French, of New York, appeared in place of W. H. Robertson, of Westchester, presenting what purported to be a proxy sent by telegraph. The selection of a temporary chairman for the convention by the committee was regarded as a test of the strength of Cornell and his opponents. E. M. Madden, the candidate of the latter, was selected over E. L. Pills by a vote of 18 to 14; Mr. Carpenter, chairman of the committee, who had been regarded as an "anti-Stalwart," voting for Madden, as well as French, who acted as proxy for Collector Robertson. The result was a victory for the anti-Cornell men. An attempt was made in the convention to set aside the choice of the committee for temporary chairman, but it was defeated by a vote of 251 to 243. Mr. Madden made a brief address, counseling harmony and a united support of the action of the convention. Subsequently the temporary organization was made permanent. The first important business of the convention was the nomination of a candidate for Governor. The names of Alonzo B. Cornell, Charles J. Folger, James W. Wadsworth, John H. Starin, and John O. Robinson, were presented in complimentary speeches, and the first ballot resulted as follows:

Whole number of votes cast.....	497
Necessary to a choice.....	249
Charles J. Folger.....	233
Alonzo B. Cornell.....	180
James W. Wadsworth.....	69
John H. Starin.....	19
John C. Robinson.....	6

A second ballot was taken, and considerable excitement was caused by changes of votes in various delegations to the Cornell or Folger side of the account. The result was:

Whole number of votes cast.....	497
Necessary for a choice.....	249
Charles J. Folger.....	257
Alonzo B. Cornell.....	223
James W. Wadsworth.....	18



On motion of United States Senator Miller, who had led the Cornell forces, the nomination of Folger was made unanimous, though many delegates refrained from voting on the motion. The convention then adjourned until the following day. Some excitement was caused the same evening by an announcement from Collector Robertson that he had sent no proxy to Mr. French, and had not authorized him to act in his place on the State Committee. The alleged proxy proved to have been written on a "sending blank" of the telegraph company, and never to have been received over the lines. It was regarded as an impudent forgery, and this fact added not a little to the dissatisfaction which the defeat of Cornell produced, it being alleged that the whole power of the "party machine" in the State, backed by the influence of the national Administration, had been used to crush a faithful Governor because he had offended ex-Senator Conkling and the corporations which he represented. On the second day of the convention, B. Platt Carpenter, of Dutchess County, was nominated for Lieutenant-Governor, receiving 280 votes out of 494 on the second ballot. His principal competitor was Hamilton Fish, Jr. A. B. Hepburn, of St. Lawrence, was nominated for Congressman-at-large, receiving 309 votes to 156 for George S. Batcheller, of Saratoga, and 8 for other candidates. Charles Andrews, of Onondaga, was unanimously nominated for Chief-Judge of the Court of Appeals. The platform, which was presented by Mr. George Bliss, chairman of the Committee on Resolutions, and unanimously adopted, was as follows:

*Resolved*, That the Republican party of New York has no new doctrine to present upon the questions which have heretofore occupied much of public attention, such as honest money, pure elections, the regulation of the traffic in intoxicating liquors, the protection of home industry, and the necessity of restricting the power and influence of corporations. It is content to be judged by its past declarations and acts.

2. That equitable taxation, reaching corporations as well as persons, is approved as a correct system which should be perfected; that the practical results of recent legislation upon the subject fully justify the action of the Republican party in its adoption.

3. That monopolies oppressing the people, or unfairly discriminating against local interests, are wrong in principle and should not be tolerated.

4. That stringent legislation should be enacted to secure the purity and honesty of primary elections, and that all possible safeguards should be thrown about these sources of the political action of the people.

5. That the practice of appealing to the Legislature to overrule the action of the local authorities when confining themselves within the powers conferred upon them should be discouraged both by the Legislature and the Governor, and should be resorted to only in extreme cases.

6. That changes in the fundamental law should not ordinarily be the subject of party action, but they should when proposed always be carefully scrutinized by the people, who should signify their wishes with reference to them as generally they do in their selection of their representatives. We, therefore, urge the people of the State, without reference to party, to examine with intelligent care the constitutional amendments submitted to them, and to give full expression at the polls to their judgment and wishes thereon.

7. That while there are varying opinions on the sale of liquors, we subscribe to the principle that propositions on that subject, like all other propositions for change in the fundamental law, ought to be submitted to the popular vote.

8. That the conduct of the Democracy in this State during this year emphatically attests anew their signal unworthiness of public confidence. They signalized their return to power in the Legislature by wantonly sacrificing the public interests upon the altar of greedy and reckless partisanship. A party which could devote nearly two months to a quarrel of its factions for spoils, but could give no time to the equalization of taxation, and to other questions vitally affecting the welfare of the people, insults the intelligence of the electors of New York when it asks them to approve its flagrant abuse of legislative powers by handing over to it the executive branch of the State government.

9. That the financial achievements of the Republican Administration are next in importance to its work of the preservation of the nation itself, as they are attended by the rapid liquidation of a great public debt, incurred to meet the national emergency, and by the reduction of the rate of interest to its present low figures, and that it is the policy of the party to bring taxation within the lowest possible limits, and, by the strictest system of economy, reduce the governmental expenses and the number of those employed in the collection of the revenue, thus relieving the people of all unnecessary burdens.

10. That the civil service should be placed upon a proper basis by adequate legislation, so as to give facilities for the execution of the law now upon the statute-book, with competitive tests for admission to the service so arranged as to secure the necessary qualifications for the positions sought, together with a fixed term for incumbents, removals from office during the term of appointment to be only for cause.

11. That the recent law of Congress designed to suppress polygamy, which offends the moral sense of mankind and prevents the administering of justice through the usual instrumentalities of law, approves itself to the people, and that it should be supplemented by such laws as may be necessary to attain the object in view.

12. That the economy and efficiency of the present Republican State Administration entitle its members to the highest praise. Governor Cornell's fearless and firm exercise of the veto-power, while it has naturally brought down upon him hostile criticism, has shown his determination to protect the interests of the State and the people alike against individuals and corporations.

13. That we tender the President, Chester A. Arthur, our assurance of confidence in his Administration, and our approval of the wise and patriotic course pursued by him under the embarrassing circumstances of his accession to office. His courage in resisting the enactment of the River and Harbor Bill, which violated the accepted rules of constitutional power, and which, while authorizing many needed public improvements, carried with it a large and wasteful appropriation for works of neither national nor public good, has secured for him the admiration even of his enemies.

14. That a hearty support be pledged to the nominees of this convention, whose records in public life, distinguished abilities, and special fitness commend them to the people's approval at the ballot-box.

When the Democratic Convention met at Syracuse, on September 21st, there was a full delegation present from each of the three local factions of New York city, and the first day was spent in organization and the settlement of their claims by the Committee on Contested Seats. An intense desire for union and harmony was displayed, and found expression in the report of the committee and its acceptance



by the convention, with the cheerful acquiescence of the factions concerned. The report of the committee, which was submitted on the morning of the second day of the convention, recognized the County Democracy as the regular delegation; but, with the view to success for the party at the polls and for the purpose of securing entire harmony, recommended that the County Democracy be allowed 38 delegates, Tammany Hall 24, and Irving Hall 10.

The following platform was adopted:

The Democracy of New York, in convention assembled, declare:

1. *Whereas*, The country is again subjected, by Republican maladministration, to the evils and abuses which afflicted it in 1874, we reaffirm the principles of our platform that year, under which the Republican party was driven from power and the government of the State brought back, for a time, to the practice of economy and honesty.

2. We arraign the Republican majority in Congress for culpable failure to reduce the amount of taxation to a sum sufficient only for the legitimate requirements of the Government, under an honest and frugal administration; and we favor such tariff and fiscal reforms as shall relieve an overtaxed people from all unnecessary burdens, and prevent the accumulation of a fund to be lavished in profligate legislation, and in support of a horde of useless and idle placemen. In particular, we proclaim our condemnation of the River and Harbor Bill, in which, by the multiplication and mutual support of obnoxious provisions, the infamous measure purchases its passage through Congress in disregard of the limitations of the Constitution, and to the deprivation of public morals.

3. In the nomination of the Secretary of the Treasury for Governor of New York, by which, in effect, the candidate for the chief magistracy of the State was appointed by the President, we see a fresh and impressive proof of the dangerous power of public patronage, and, urged by this alarming spectacle, we protest against Federal intervention in State elections, and repeat our demand of 1881 for reform and purification of the civil service; and we are further admonished by the recent experience of Republican corruption of the necessity of forbidding, by penal enactment, the levying of black-mail from dependent office-holders to promote the interests of the party, which finds no support in the intelligent and independent convictions of the people.

4. We hold the present Republican Administration responsible for the unredressed outrages on our foreign-born fellow-citizens, and we demand for them, when abroad, the protection to which they are entitled in return for the voluntary allegiance which the honor of the American Government requires shall be extended to them.

5. We charge that in this State the Republican party has lowered the standard of public service by its local administration, and by the representatives it has sent to the two Houses of Congress. That it has made the State Legislature an instrument of the lobby to rob the public and enrich corporations, and has refused to its Governor the renomination which was due to him by custom, because he dared to use his veto-power to thwart such purpose, in disregard of those who sought to control him by the influence of political and moneyed power.

6. We demand the restoration of the New York State National Guard to the efficiency of which it has been deprived, and which made it representative of the soldierly spirit of the people.

7. In order to restore our merchant marine to its former prosperity, we demand the immediate revision and amendment of the laws relating to the shipping and carriage of ocean-freights.

8. We favor the adoption, by the next Legislature, of the resolution of 1882, providing amendments to

the Constitution for the local self-government of cities.

9. Primary elections, openly and honestly conducted, afford the surest means of securing the most suitable candidates for public office, thus best preserving the democratic form of government. We, therefore, favor the speedy passage of general laws providing against fraud and intimidation at such election.

10. The public welfare demands that the various questions relating to chartered monopolies and methods of transportation should be met and decided, and we are in favor of the adoption of measures to restrict the growing power of such monopolies. They should be subjected to the strict supervision of the commission now provided by law. All unjust discriminations in the transportation of passengers and merchandise should be prohibited. The charges of corporations, which have taken the property of private citizens for public use, should be limited to the cost of the service, with a reasonable profit, instead of the mercenary exaction of "all the traffic will bear." The laws should be so revised that taxation may be reduced, as far as possible, and that personal and corporate property may severally pay their fair proportion of the taxes.

11. We approve the submission to the vote of the people of the constitutional amendment in favor of free canals, and we have full confidence that they will dispose of it in such a manner as to promote all the great interests of the State, agricultural, manufacturing, and commercial.

12. We reaffirm the policy always maintained by the Democratic party, that it is of the first importance that labor should be made free, healthful, and secure of just remuneration. That convict-labor should not come into competition with the industry of law-abiding citizens. That the labor of children should be surrounded with such safeguards as their health, their rights of education, and their future, as useful members of the community, demand. That workshops, whether large or small, should be under such sanitary control as will insure the health and comfort of the employed, and will protect all against unwholesome labor and surroundings. That labor shall have the same right as capital to combine for its own protection, and that all legislation which cramps industry, or which enables the powerful to oppress the weak, should be repealed; and, to promote the interests of labor, we recommend the collection of statistics and information respecting the improvements, needs, and abuses of the various branches of industry.

13. Whereas the founders of the Democratic party inculcated frequent recurrence to fundamental principles, the Democracy of New York again avow their fidelity and respect for the liberty of the individual, which characterized the administration of the Government in the primitive days of the republic.

The first choice for a candidate for Governor was greatly divided, and the following was the result of the first ballot:

Whole number of votes cast.....	384
Necessary to a choice.....	193
Henry W. Slocum.....	93
Roswell P. Flower.....	97
Grover Cleveland.....	66
Allan Campbell.....	87
Erastus Corning.....	85
Homer A. Nelson.....	26
Waldo Hutchins.....	13
Perry Belmont.....	12

On the second ballot, Slocum and Flower had 123 votes each, and Cleveland only 71; but it was evident that a break in the forces was impending. The third ballot was taken amid much excitement, and resulted as follows:

Whole number of votes cast.....	389
Necessary to a choice.....	192
Grover Cleveland.....	211
Henry W. Slocum.....	156
Roswell P. Flower.....	13



The nomination was made unanimous, and the ticket was completed at leisure at an evening session. D. B. Hill, of Elmira, was named for Lieutenant-Governor; Henry W. Slocum, of Brooklyn, for Congressman-at-large; and W. C. Ruger, of Onondaga, for Chief-Judge of the Court of Appeals.

There was a Prohibitory Convention at Syracuse, on the 4th of October, at which the following resolutions were adopted:

*Resolved*, That we recognize the hand of Almighty God in a movement that has already accomplished so much for the suppression of the liquor-traffic in other States, and that is kindling so great enthusiasm among the friends of temperance in our State.

*Resolved*, That we call for the submission to the people of this State of an amendment to the Constitution prohibiting the manufacture and sale of alcoholic beverages.

*Resolved*, That we do not identify ourselves with any partisan movement, but as a convention representing temperance societies and Christian churches of the State of New York we do seek such legislation as shall free our noble State from the power of rum, which we recognize as an enemy of all that is good; and we do hereby call upon all good citizens, irrespective of party or creed, to aid in this object.

After discussion the following was added: "And that we pledge ourselves to vote for no candidate for the Legislature who will not publicly pledge himself in favor of submitting such amendment to the vote of the people."

A. A. Hopkins was selected as the Prohibition candidate for Governor.

On the 3d of October the State Committee of the Anti-Monopoly League issued an address, in which it declared in favor of the Democratic State ticket.

An organization in favor of the free canal amendment of the Constitution was formed by various commercial bodies in New York during the month of July, known as the Free Canal Union; but the political conventions generally were content to declare in favor of submitting the question to the people for their decision.

Shortly after the Republican Convention the State Committee of the party was reorganized, with John F. Smyth, of Albany, as chairman, and with the "Stalwart" element in full control. The following resolution was adopted at its first meeting:

*Resolved*, That the State Committee expresses its detestation of the attempt made at Saratoga to influence the decision of the late State Committee by the use of a forged telegram, and its detestation of all the methods and purposes to which such wretched fraud and treachery apply, and that this committee tenders its cordial co-operation to any authorities or persons investigating the crime, to the end that its authors may be speedily ascertained and held up to the scorn of the people.

Mr. Folger sent to the chairman of the convention a long letter of acceptance, on the 2d of October, in which he referred to the charges of forgery, the manifest dissatisfaction existing in the party, and a suggestion in some quarters that he ought to decline the nomination. He was of opinion, however, that the convention was properly constituted and had acted delib-

erately, and he did not feel at liberty to decline. He referred to the circumstances under which the nomination came to him without any seeking on his part, and made a long statement of his position on various State questions. He was in favor of economy, local self-government, regulation of primary elections, supervision of corporations, etc. On the same day Mr. Hepburn sent the following letter to the chairman of the State Committee:

NEW YORK, October 2, 1882.

*The Hon. John F. Smyth, Chairman Republican State Central Committee.*

DEAR SIR: Having received no formal notice of my nomination for the office of Congressman-at-large by the recent Republican Convention, I address this communication to you. It is quite apparent that, owing to the unfortunate circumstances that have come to light since the adjournment of the convention, a very large portion of the Republicans of the State are not disposed to accept its conclusions as an authoritative utterance of the party. Nothing should be left undone to secure the unity and harmony of the party, and I don't think it right to enter upon the canvass without an earnest effort in that direction.

It seems to me that for the purpose of attaining such result all questions should be submitted anew to the representatives of the party assembled for such purpose, and in furtherance of that object, while fully appreciating the very high compliment paid me by the convention, and returning my sincere thanks for the same, I deem it my duty to acquaint you with my declination of said nomination. Very respectfully yours, A. B. HEPBURN.

On the following day Mr. Carpenter accepted the nomination for Lieutenant-Governor in a letter of some length, in which he disclaimed seeking the nomination, or being concerned in any bargain. Mr. Andrews the same day briefly accepted the nomination for Chief-Judge. The vacancy on the ticket occasioned by the declination of Mr. Hepburn was filled by the State Committee, who designated Howard Carroll, of New York, as the candidate for Congressman-at-large.

The acceptance of the nominations by the Democratic candidates was formally made on the 7th of October. The following are the principal declarations of Mr. Cleveland's letter:

Our citizens, for the most part, attach themselves to one or the other of the great political parties, and, under ordinary circumstances, they support the nominees of the party to which they profess fealty. It is quite apparent that under such circumstances the primary election or caucus should be surrounded by such safeguards as will secure absolutely free and uncontrolled action. Here the people themselves are supposed to speak; here they put their own hands to the machinery of government, and in this place should be found the manifestation of the popular will. When by fraud, intimidation, or any other questionable practice, the voice of the people is here smothered, a direct blow is aimed at a most precious right, and one which the law should be swift to protect. If the primary election is uncontaminated and fairly conducted, those there chosen to represent the people will go forth with the impress of the people's will upon them, and the benefits and purposes of a truly representative government will be attained.

Public officers are the servants and agents of the people, to execute laws which the people have made, and within the limits of a Constitution which they have established. Hence the interference of officials



of any degree, and whether State or Federal, for the purpose of thwarting or controlling the popular wish, should not be tolerated.

Subordinates in public places should be selected and retained for their efficiency, and not because they may be used to accomplish partisan ends. The people have a right to demand here, as in cases of private employment, that their money be paid to those who will render the best service in return; and that the appointment to and tenure of such places should depend upon ability and merit. If the clerks and assistants in public departments were paid the same compensation and required to do the same amount of work as those employed in prudently conducted private establishments, the anxiety to hold these public places would be much diminished, and, it seems to me, the cause of civil-service reform materially aided.

The system of levying assessments for partisan purposes on those holding office or place can not be too strongly condemned. Through the thin disguise of voluntary contributions this is seen to be naked extortion, reducing the compensation which should be honestly earned, and swelling a fund used to debauch the people and defeat the popular will.

I am unalterably opposed to the interference by the Legislature with the government of municipalities. I believe in the intelligence of the people when left to an honest freedom in their choice, and that when the citizens of any section of the State have determined upon the details of a local government, they should be left in the undisturbed enjoyment of the same. The doctrine of home-rule, as I understand it, lies at the foundation of republican institutions, and can not be too strongly insisted upon.

Corporations are created by the law for certain defined purposes, and are restricted in their operations by specific limitations; acting within their legitimate sphere they should be protected; but when by combination or by the exercise of unwarranted power they oppress the people, the same authority which created should restrain them and protect the rights of the citizen. The law lately passed for the purpose of adjusting the relations between the people and the corporations should be executed in good faith, with an honest design to effectuate its objects, and with a due regard for the interests involved.

The laboring classes constitute the main part of our population. They should be protected in their efforts peaceably to assert their rights when endangered by aggregated capital, and all statutes on this subject should recognize the care of the State for honest toil, and be framed with a view of improving the condition of the working-man.

We have so lately had a demonstration of the value of our citizen soldiery in time of peril that it seems to me no argument is necessary to prove that it should be maintained in a state of efficiency, so that its usefulness shall not be impaired.

Certain amendments to the Constitution of our State, involving the management of our canals, are to be passed upon at the coming election. This subject affects diverse interests, and, of course, gives rise to opposite opinions. It is in the hands of the sovereign people for final settlement; and as the question is thus removed from State legislation, any statement of my opinion in regard to it at this time would, I think, be out of place. I am confident that the people will intelligently examine the merits of the subject, and determine where the preponderance of interest lies.

The expenditure of money to influence the action of the people at the polls, or to secure legislation, is calculated to excite the gravest concern. When this pernicious agency is successfully employed, a representative form of government becomes a sham, and laws passed under its baleful influence cease to protect, but are made the means by which the rights of the people are sacrificed, and the public Treasury despoiled. It is useless and foolish to shut our eyes to the fact that this evil exists among us; and the party which leads in an honest effort to return to better and purer meth-

ods will receive the confidence of our citizens and secure their support. It is willful blindness not to see that the people care but little for party obligations when they are invoked to countenance and sustain fraudulent and corrupt practices. And it is well for our country and for the purification of politics that the people, at times fully roused to danger, remind their leaders that party methods should be something more than a means used to answer the purposes of those who profit by political occupation.

An incident of the canvass which attracted some attention was a letter of Secretary Folger to a Republican meeting at Albany, in which he spoke of the effect of Democratic success upon the material interests of the country in the following terms:

As the barometer tells of atmospheric changes imperceptible to the senses, so the state of the great markets of the country shows the sentiment of the business of the country as to political events. Take one instance. The Ohio election took place on Tuesday, the 10th day of this month. It resulted in a gain to the Democratic party of several Congressmen for the next Congress. At once there arose a jubilant claim from the organs of that party that the next House of Representatives would be Democratic. How did business and capital regard that claim and the consequence of it, if true? It is estimated from well-founded data, that on Wednesday, the 11th day of October, the day following, there was a shrinkage of values in the great properties of the country of over forty millions of dollars. That shrinkage has been going on since. Do the business interests of the country look with dread to a return of the Democratic party to a control of Federal legislation? Is it a well-founded dread? Will the election of the Democratic ticket in the State of New York increase it, and give it greater reason for existence? These are questions for hesitating Republicans to ponder.

Both candidates for Governor were questioned by the Civil-Service Reform Association as to their sentiments toward the cause which it represented. Mr. Folger, in his reply, said:

In any public capacity in which I may be placed I will use the legitimate influence that I have thereby to further legislation desirable for the improvement of the public civil service, and well devised therefor, and to that end will call the attention to the matter of any body which I have the right to address upon such a subject.

I have already, in an official capacity, more than once, in communication with my subordinates, declared that they need not feel forced to give for party purposes, and have promised them immunity if they refuse; and have declined sanction of a tour of visitation of request for contributions.

Mr. Cleveland's reply contained the following:

I have no hesitation in saying that I fully approve of the principles embodied in the Pendleton bill relating to this subject, and that I should be glad to aid in any practical legislation which would give them a place in the management of the affairs of the State and of municipalities, so far as they can be made applicable thereto. I believe that the interests of the people demand that a reform in the national and State administrative service should speedily become an accomplished fact, and that the public should receive honest and faithful service at the hands of well-fitted and competent servants. When contests between parties are waged for the purpose of securing places for professional politicians, of high or low degree, whose only recommendation for appointment is their supposed ability to do partisan service, the people are apt to be defrauded by the displacement of tried and faithful ser-

vants, well able to perform the duties for which they are paid with the people's money, and the substitution of those who are unfit and incompetent. In this way the interests of the party may be subserved, but the interests of the people are neglected and betrayed. This pernicious system gives rise to an office-holding class, who in their partisan zeal, based upon the hope of personal advantage, arrogate to themselves an undue and mischievous interference with the will of the people in political action; this breeds the use of dishonest and reprehensible methods, which frequently result in the servants of the people dictating to their masters. If places in the public service are worth seeking, they should be the reward of merit and well-doing, and the opportunity to secure them on that basis should be open to all. Those holding these places should be assured that their tenure depends upon their efficiency and fidelity to their trusts, and they should not be allowed to use them for partisan purposes. The money they earn they should receive and be allowed to retain, and no part of it should be exacted from them by way of political assessments. It seems to me that very much or all of what we desire in the direction of civil-service reform is included in the doctrine that the concerns of the State and nation should be conducted on business principles, and as nearly as possible in the same manner that a prudent citizen conducts his private affairs. If this principle is kept constantly in mind, I believe the details of a plan by which its adoption may be secured will, without much difficulty, be suggested.

In the city of New York the canvass was characterized by a local contest of more than usual interest. An effort was made to secure a non-partisan municipal government by means of citizens' nominations. A committee was appointed for the purpose at a public meeting, and Mr. Allan Campbell, Comptroller of the city, was nominated for Mayor, and Colonel Emmons Clark for Sheriff, while William A. Butler was renominated for County Clerk. Before these nominations were made, however, the three Democratic factions had agreed upon a ticket bearing the names of Franklin Edson for Mayor, Alexander B. Davidson for Sheriff, and Patrick Keenan for County Clerk. An effort was made to induce the Republican organization to support the citizens' ticket, but it insisted upon John J. O'Brien as a candidate for County Clerk, which seriously impaired the unity of its support.

Before the election it became evident that the dissatisfaction in the Republican ranks was deep and wide-spread, and that the differences between the leaders of the factions were well-nigh irreconcilable, while the Democrats were united in an effort to profit by this condition of things and gain ascendancy in the State. The election took place on the 7th of November, and resulted in an overwhelming Republican defeat.

The official returns showed the total vote for Governor to be 918,894, divided as follows:

Grover Cleveland, Democrat.....	535,818
Charles J. Folger, Republican.....	342,464
Epenetus Howe, Greenback.....	11,974
Alphonse A. Hopkins, Prohibition.....	25,783
Blank and scattering.....	8,355

Cleveland's plurality over Folger was 192,854, and his majority over all, 151,742. For other State offices the votes were:

#### LIEUTENANT-GOVERNOR.

David B. Hill.....	534,636
B. Platt Carpenter.....	387,855
James Allan.....	11,894
William H. Boole.....	27,158
Blank and scattering.....	4,818

Whole number.....

Hill's plurality, 196,781. 915,861

#### CHIEF-JUDGE OF THE COURT OF APPEALS.

William C. Ruger.....	432,222
Charles Andrews.....	409,428
Lawrence J. McParlin.....	10,527
Charles A. Hammond.....	16,234
Blank and scattering.....	1,600

Whole number.....

Ruger's plurality, 73,400. 920,605

#### CONGRESSMAN-AT-LARGE.

Henry W. Slocum.....	503,954
Howard Carroll.....	394,232
Leonard G. McDonald.....	10,567
Linus S. Freeman.....	14,724
Blank and scattering.....	5,474

Whole number.....

Slocum's plurality, 109,722. 928,941

The two amendments of the Constitution were ratified by large majorities. There was some doubt as to the form of ballot required in voting on the canal amendment. The amendment effected changes in sections 3, 5, and 6 in Article VII, but the bill providing for its submission to a vote of the people, and prescribing the form of ballot, declared that ballots should read, "For the proposed amendment to section 3, Article VII of the Constitution," or against the same, as the case might be, making no mention of the other sections to be changed. The Attorney-General, when consulted before the election, advised that ballots should mention all three of the sections to be affected, and expressed doubt as to whether the amendment would have the full effect intended unless all three were included. Ballots were prepared and distributed, nevertheless, in strict accord with the law, but some were used which accorded with the Attorney-General's view. The result was, that the vote as declared stood:

For the amendment to section 3 of Article VII of the Constitution.....	456,105
Against the same.....	168,151
For the amendment to sections 3, 5, 6, of Article VII of the Constitution.....	9,609
Against the same.....	20,061
Blank and scattering.....	260

Whole number..... 679,186

The only counties where ballots were counted for and against amendments to sections 3, 5, and 6 of Article VII, were Monroe, Orange, Putnam, and St. Lawrence.

After the election the Attorney-General was consulted as to whether this was a valid ratification of the amendment as affecting the three sections, and he gave it as his opinion that it was. The judiciary amendment was adopted by a vote of 248,784 in its favor, to 75,644 against it, and 626 blank and scattering. Nineteen of the Representatives in Congress chosen from the districts were Democrats. The names of those elected, with their several



majorities, were as follow—"D" signifying Democrat, and "R" Republican:

DISTRICT.	Congressmen.	
1.....	Perry Belmont, D.....	18,729
2.....	William E. Robinson, D.....	8,236
3.....	D. R. James, R.....	2,398
4.....	Felix Campbell, D.....	7,550
5.....	Nicholas Muller, D.....	15,873
6.....	S. S. Cox, D.....	11,317
7.....	William Dorsheimer, D.....	4,614
8.....	John J. Adams, D.....	1,185
9.....	John Hardy, D.....	8,974
10.....	Abram S. Hewitt, D.....	14,361
11.....	Orlando B. Potter, D.....	1,102
12.....	Waldo Hutchins, D.....	6,726
13.....	John H. Ketchum, R.....	14,203
14.....	Lewis Beach, D.....	691
15.....	John H. Bagley, Jr., D.....	8,457
16.....	Thomas J. Van Alstyne, D.....	6,303
17.....	Henry G. Burleigh, R. (no opposition).....	17,685
18.....	F. A. Johnson, R.....	9,191
19.....	A. X. Parker, R.....	5,213
20.....	Edward Wemple, D.....	89
21.....	George W. Ray, R.....	445
22.....	Charles R. Skinner, R.....	1,269
23.....	J. Thomas Spriggs, R.....	1,676
24.....	N. W. Nutting, R.....	1,611
25.....	Frank Hiscock, R.....	728
26.....	Sereno E. Payne, R.....	971
27.....	J. W. Wadsworth, R.....	1,088
28.....	S. C. Millard, R.....	1,609
29.....	John Arnot, D.....	2,178
30.....	H. S. Greenleaf, D.....	5,734
31.....	Robert S. Stevens, D.....	8,680
32.....	William F. Rogers, D.....	727
33.....	F. B. Brewer, R.....	2,549

himself with marked ability in that position. Two years later he was the Democratic candidate for the office of District Attorney, but was defeated by a small majority by Lyman K. Bass. Mr. Cleveland pursued his professional practice with success until 1870, when he was chosen Sheriff of Erie County, holding that office three years. He then returned to active practice, and not long after became the head of the firm of Cleveland, Bissel & Sicord, which has won a leading position at the Buffalo bar.



GROVER CLEVELAND.

In the local contest in New York city the citizens' ticket was defeated, and that of the united Democracy was successful. The vote was: For Mayor—Edson, 97,802; Campbell, 76,385. For Sheriff—Davidson, 97,376; Clarke, 77,158. For County Clerk—Keenan, 84,180; Butler, 50,898; O'Brien, 38,930. The Democratic majority for Mayor was therefore 21,417; for Sheriff, 20,218; and, for County Clerk, Keenan's plurality over Butler was 33,282. The city vote for Governor was: Cleveland, 124,914; Folger, 47,785; Howe, 1,537; Hopkins, 584.

In the Legislature of 1883 the Senate remained unchanged, as its members are chosen for two years. It consisted of 18 Democrats and 14 Republicans. The Assembly consisted of 84 Democrats, 42 Republicans, 1 Republican and Working-man, and 1 Independent.

GROVER CLEVELAND, the new Governor, was born in the town of Caldwell, Essex County, N. J., March 18, 1837, but his family was of New England origin, his father, Rev. Richard Cleveland, having been a Presbyterian clergyman at Norwich, Conn., whence he removed to New Jersey some time before the son's birth. Having obtained what education the public schools of his native town afforded, young Cleveland attended an academy at Clinton, N. Y., for a time. At the age of seventeen he set out for the West to seek the wide opportunities afforded in that section. His first intention was to go to Cleveland, but, stopping with an uncle in Buffalo for a time, he concluded to make his home there. He studied law, and was admitted to practice in 1859. In 1862 he was appointed Assistant District Attorney of Erie County, and acquitted

In the fall of 1881 popular dissatisfaction with the administration of municipal affairs in Buffalo led to a warm local contest. The Democrats nominated Mr. Cleveland for Mayor, knowing that his independence, uprightness, and ability would win much support from the opposite party. The result justified their calculations, and he was elected by a majority of more than 5,000, though the Republican majority in the city was ordinarily between 2,000 and 3,000. The vigorous, independent, and popular character of his administration there, as well as his success in the canvass which preceded it, attracted attention throughout the State, led to his nomination for Governor, and contributed to the overwhelming success of his candidacy.

The funded debt of the State on the 30th of September, the close of the fiscal year, deducting an unapplied balance in the sinking fund of the canal debt, was \$6,385,356.30. Of this sum, \$122,694.87 was the amount necessary to yield, at 6 per cent interest, the sum required to pay the annuities to Indians; \$3,000 was unclaimed bounty debt; and the remainder, \$6,259,661.43, represented the canal debt. The only change in the funded indebtedness of the State during the last fiscal year was a contribution of \$309,717 to the sinking fund. The aggregate receipts of the State Treasury during the fiscal year, including a balance from the previous year amounting to \$5,531,858.71, were \$17,735,761.59; the payments during the same

period amounted to \$13,898,198.21, leaving a balance in the Treasury at the beginning of the new fiscal year of \$3,837,563.38. The amount received from taxes on corporations during the year was \$1,539,684.27, being an increase of \$546,959.11 over the previous year. The rate of taxation for the current fiscal year was fixed by the Legislature at 2½ mills on the dollar, which was estimated to yield a revenue of \$6,820,022.29. The assessed value of property is \$2,985,682,567, of which \$2,432,661,378 is real estate.

The revenues of the canals, for the year ending September 30th, were as follow:

Tolls.....	\$647,602 88
Rent of surplus water.....	1,910 85
Miscellaneous sources.....	10,456 62

Total.....	\$659,970 35
The expenditures amounted to.....	658,510 01

Leaving a surplus of..... \$6,460 84

For the year ending September 30, 1881, the revenue failed to meet the expenditures by the sum of \$205,642.45. The following is a statement of freight carried and tolls collected from the opening of navigation to December 1st in the years 1881 and 1882:

	Tons moved.	Tolls collected.
1882.....	5,421,720	\$655,195 51
1881.....	5,143,877	631,621 11
Gain in 1882.....	277,843	\$23,574 45

The tolls received after September 30th, with an unexpended appropriation in the canal fund, amounting together to \$588,000, were deemed sufficient for repairs until the end of the current fiscal year, after which the canals will have to be supported by taxation. Eighty-nine claims, amounting to \$168,652.57, were filed with the Board of Canal Appraisers during the year. During the same time 273 claims, aggregating \$866,741.58, were disposed of, the awards amounting to \$19,644.76. The cost of maintaining the board, exclusive of awards, was \$39,639.20, of which \$15,280.07 was paid to attorneys employed to defend the State against claimants.

Seventy-six banks of discount and deposit were engaged in active business under the provisions of the banking laws of the State, on the 1st day of October. On that day their condition was reported as follows:

Resources.....	\$122,563,460
Capital.....	18,805,700
Surplus and profits.....	9,657,702
Due depositors.....	82,050,980
Other liabilities.....	12,049,078

The increase in deposits during the year was \$6,333,850; profits, \$729,527; loans and discounts, \$5,503,379; and the net aggregate increase in assets was \$9,099,888. During the year six new banking associations were organized, one failed, and one was converted from a State to a national bank. On the 1st day of July, 1882, the number of savings-banks reporting to the Superintendent of the Bank De-

partment was 127, of which number 11 were in process of voluntary liquidation. During the year one new savings institution was organized, and one closed, having first paid its depositors and creditors in full. The condition of the savings-banks on the day named was as follows:

Resources.....	\$460,123,582
Due depositors.....	400,748,888
Surplus.....	59,187,089
Other liabilities.....	222,705
Number of open accounts.....	1,066,518

The increase in these several items during the year was as follows:

Resources.....	\$35,918,774
Deposits.....	80,071,541
Surplus.....	6,538,656
Open accounts.....	70,776

There were 14 trust, loan, and mortgage companies in the State, whose condition on July 1st was as follows:

Resources.....	\$139,758,534
Capital.....	12,579,500
Surplus and profits.....	9,854,376
Deposits.....	104,888,185
Other liabilities.....	12,486,473

This statement shows an increase over the preceding year of \$10,765,848 in deposits, \$1,322,027 in surplus and profits, and a net aggregate increase in assets of \$13,869,620. On the 1st day of October there were in the State 14 corporations for the safe-keeping and guaranteeing of personal property, employing \$2,676,900 of capital in the aggregate.

There were 151 fire-insurance companies doing business in the State on the 1st day of July, of which 69 were New York State companies, 55 were organized in other States, and 27 were foreign companies, with assets amounting in the aggregate to \$154,810,890.43; their total liabilities, including capital stock, were \$111,423,096.62, and their net surplus \$43,387,793.81. There were 12 marine insurance companies doing business in the State on the 1st day of January, with assets amounting to \$22,888,423.93, and liabilities, including capital stock and scrip, amounting in the aggregate to \$18,183,850.69, leaving a net surplus of \$4,704,573.24. There were 12 life-insurance companies organized and doing business under the laws of this State, with assets amounting in the aggregate to \$225,966,512.02; liabilities, \$187,050,970.48, leaving a surplus, as regards policy-holders, of \$38,915,541.54. There were also 17 life-insurance companies organized in other States, but doing business in New York, with total assets of \$208,310,947.58, and liabilities amounting to \$169,813,325.83, leaving a surplus, as regards policy-holders, of \$33,497,621.75; also one foreign life-insurance company, with total assets in the United States of \$123,735.09, liabilities \$5,248.75, and surplus \$118,486.34. There were six casualty-insurance companies, of which two were New York companies, two organized in other States, and two were foreign companies, with aggregate assets amounting to \$3,110,737.11; liabilities, \$1,948,199.53, and a net surplus of



\$1,162,537.58. The number of co-operative insurance companies transacting business in the State on the 1st day of January was 115, having 325,524 certificates in force, of which 90,219 were written during the year 1881. Within the last-mentioned year 28,274 certificates terminated, and losses to the amount of \$4,742,090 were paid by this class of insurance organizations. During the year 1882 there was organized under the general insurance laws of the State one mutual fire-insurance company, with a paid-up cash contribution of \$200,000, and one plate-glass insurance company, with a paid-up capital of \$100,000. Eight fire-insurance companies, four organized in other States and four foreign companies, were during the year admitted to transact business in the State, with total assets amounting to \$3,220,464.36, and liabilities, including capital stock, amounting to \$1,554,788.42. Thirteen fire, two life, and two marine insurance companies, have ceased to do business in this State during the year.

On the 1st day of July, 1882, the amount of securities, for the protection of policy-holders insured by the various insurance companies transacting business in the State, held on deposit in the Insurance Department, as required by law, was \$13,594,749.30, classified as follows:

New York State life-insurance companies.....	\$2,852,097 86
New York casualty-insurance companies.....	201,509 95
New York fire-insurance companies.....	1,638,000 00
Fire-insurance companies of other States.....	20,100 00
Foreign insurance companies.....	8,868,041 99
Total.....	\$13,594,749 30

The value of the property held by the various charitable institutions, on the 30th day of September, was \$41,103,809.54, of which \$33,501,605.36 was real estate, and \$7,602,304.18 personal property. The receipts of these institutions during the last fiscal year were \$10,186,810.91, derived from the following sources:

State of New York.....	\$719,302 40
Cities and counties.....	4,236,130 00
Paying inmates.....	371,017 13
Invested funds.....	397,074 90
Donations.....	1,238,876 59
Loans.....	355,943 00
Labor of inmates.....	68,747 05
All other sources.....	2,760,620 84
Total.....	\$10,186,810 91

The expenditures during the same period were as follow:

State institutions.....	\$1,432,819 84
County and city institutions.....	2,340,806 55
Incorporated benevolent institutions.....	5,391,439 23
The number of State paupers in the various institutions September 30, 1881, was.....	164
Committed during the year ending September 30, 1882.....	1,392
Total.....	1,556
During the same period the number of deaths was.....	43
Discharged.....	1,350
Under care October 1, 1882.....	163

Of the number reported as discharged, 778 were furnished transportation to their homes

in other States and countries, or to their places of legal settlement.

Forty-eight lunatic, idiotic, crippled, blind, and otherwise disabled alien paupers, were sent back to the countries whence they came by the State Board of Charities during the year.

The number of insane in the various institutions on the 30th day of September was 10,443, distributed as follows:

In State institutions.....	8,105
In county poor-houses and asylums.....	1,995
In city almshouses and city asylums.....	4,739
In private asylums.....	603
In the Asylum for Insane Convicts at Auburn.....	141
Total.....	10,438

Of the insane in the State institutions, 2,022 were confined in the Willard and Binghamton Asylums, they being entirely of the chronic class. The number of insane persons in the several institutions, as given above, is 384 in excess of that reported at the close of the previous year.

The earnings and expenditures of the several State-Prisons during the year ending September 30th were as follow:

AUBURN.	
Earnings.....	\$120,234 16
Expenses.....	122,926 48
Deficiency.....	\$2,692 27
CLINTON.	
Earnings.....	\$60,361 59
Expenses.....	99,606 40
Deficiency.....	\$39,244 88
SING SING.	
Earnings.....	\$241,321 93
Expenses.....	193,127 20
Surplus.....	\$48,194 73

The total earnings of the three prisons were \$6,257.58 in excess of their expenses. On the 30th day of September the number of convicts confined in Sing Sing Prison was 1,526, while Auburn contained 912, and Clinton 499. The Asylum for Insane convicts at Auburn contained 141 inmates, of which nine were women.

The public-school statistics for the year ending September 30th are as follow:

Total receipts, including balance on hand October 1, 1881.....	\$12,543,446 84
Total expenditures.....	11,181,986 55
Amount paid for teachers' wages.....	7,956,383 96
Amount paid for school-houses, repairs, furniture, etc.....	1,525,578 26
Estimated value of school-houses and sites.....	30,333,641 00
Number of teachers employed for the legal term of school.....	20,599
Number of teachers employed during any portion of the year.....	31,232
Number of children attending public schools.....	1,041,089
Number of persons attending normal schools.....	6,156
Number of volumes in school-district libraries.....	705,512
Number of persons in the State between the ages of five and twenty-one years.....	1,681,113

The number of children attending public schools during the last fiscal year was 19,807 in excess of the number reported the year previous.

The number of immigrants landed at Castle Garden during the year was about 460,000, being the largest number landed in any year

since the creation of the commission in 1847. Of the appropriation of \$200,000, made by the Legislature for the maintenance of the commission, \$47,569.46 had been expended at the close of the year in protecting the immigrants while landing, directing and forwarding those who had destinations fixed upon, assisting such as sought employment, and caring for the sick and helpless, and \$23,473.24 for special repairs to buildings. Under an act of Congress, passed in August, the sum of fifty cents for each alien passenger intending to remain in this country was thereafter collected by the United States Treasury Department, and credited to the Emigration Commission. The sum collected for the first three full months after the law went into operation was \$8,000 less than the expenditure for that period.

The total cost of the new State Capitol to the close of the year, including \$150,000 available for work in progress, was \$14,222,993.09. The two legislative chambers and offices for most of the State officers were completed. The Court of Appeals room was expected to be finished by March 1, 1883. The amount expended during the year was \$1,400,000, applied mainly to the completion of the east front and roof, the outer walls of the west front, the main tower, and certain rooms and offices. The outer walls were substantially completed. The commissioners estimated that \$1,000,000 to \$1,250,000 would be needed for the next year's work. Statements having been made to the effect that certain parts of the building were unsafe—and especially so the heavy vaulted ceiling of the Assembly Chamber—Governor Cornell appointed a commission, consisting of W. P. Trowbridge, Charles Babcock, and George B. Post, to make an examination. The report of the commission, made on the 26th of September, sustained the statements in part, and recommended that the stone vaulting in the Assembly Chamber be replaced by a construction of wood, on account of its great weight and insufficient support. The architects of the Capitol, Leopold Eidlitz, H. H. Richardson, and Frederick L. Olmsted, replied to the criticisms and conclusions of the commission in a communication to the Governor, dated October 6th. They showed that the apprehensions regarding the safety of the Assembly Chamber were without foundation, giving in detail the supports, the variations from perpendicular of columns, the settling of bases, etc., which were less, rather than more, than is usual in such cases. The closing paragraph of the architects' statement is as follows:

We find in the report of the commission no warrant for any further recommendation, except that the fractured stone still remaining in the main vault be replaced; that the work be properly pointed, and that the equilibrium of all the vaults be reviewed, and, if need be, corrected. Nor can we find in the report warrant for any other opinion than that when these slight repairs are made the vaulted ceiling of the Assembly Chamber will be a perfectly sound and perma-

nent structure. In its present condition, and without repairs, there is nothing in the condition of the ceiling to warrant apprehensions in regard to its safety, or to prevent the immediate occupation of the chamber by the Assembly.

General Newton M. Curtis, special agent of the United States Treasury in the New York Custom-House, was indicted in the early part of the year, under the law forbidding public officers to collect contributions of money for political purposes. On trial he was convicted, and a motion in arrest of judgment, and for a new trial, was denied by the Circuit Court in July. The decision was sustained on an appeal to the Supreme Court of the United States in December. (See *POLITICAL ASSESSMENTS*.)

The freight-handlers' strike in New York city, during the summer, led to an important judicial decision regarding the obligations of railroad companies, and the power of the State through the courts to compel them to fulfill those obligations. (For particulars of the case see page 456, under *LABOR, MOVEMENTS OF*.) In rendering the decision of the General Term in January, 1883, Judge Davis said:

The question presented by the motion is one of signal importance. It is whether the people of the State can invoke the power of the courts to compel the exercise by railroad corporations of the most useful public functions with which they are clothed. If the people have that right, there can be no doubt that their Attorney-General is the proper officer to set it in effective operation on their behalf. The question involves a consideration of the nature of this class of corporations, the objects for which they are created, the powers conferred, and the duties imposed upon them by the laws of their creation and of the State. As bodies corporate, their ownership may be, and usually is, altogether private, belonging to the holders of their capital stock, and their managements may be vested in such officers and agents as the stockholders and directors under the provisions of the law may appoint. In this sense they are to be regarded as trading or private corporations, having in view the profit or advantage of the corporators. But these conditions are in no just sense in conflict with their obligations and duties to the public. The objects of their creation are from their very nature largely different from those of ordinary private and trading corporations. Railroads are in every essential quality public highways, created for public use, but permitted to be owned, controlled, and managed by private persons. But for this quality the railroads of the respondent could not lawfully exist. Their construction depended upon the exercise of the right of eminent domain, which belongs to the State in its corporate capacity alone, and can not be conferred except upon a "public use." The State has no power to grant the right of eminent domain to any corporation or person for other than a public use. Every attempt to go beyond that is void by the Constitution, and, although the Legislature may determine what is a necessary public use, it can not by any sort of enactment divest of that character any portion of the right of eminent domain which it may confer. This characteristic of "public use" is in no sense lost or diminished by the fact that the use of the railroad by the corporation which constructs or owns it must from its nature be exclusive. That incident grows out of the method of use, which does not admit of any enjoyment in common by the public. The general and popular use of a railroad as a highway is therefore handed over exclusively to corporate management and control, because that is for the best and manifest advantage of the public. The progress of science and



skill has shown that highways may be created for public use of such form and kind that the best and most advantageous enjoyment by the public can only be secured through the ownership, management, and control of corporate bodies created for that purpose, and the people of the State are not restricted from availing themselves of the best modes for the carriage of their persons and property. There is nothing in the Constitution hostile to the adoption and use by the State of any and every newly developed form or kind of travel and traffic which have a public use for their end and aim, and giving to them vital activity by the use of the power of eminent domain. When the earliest Constitution of our State was adopted, railroads were unknown. The public highways of the State were its turnpikes, ordinary roads, and navigable waters. The exercise of eminent domain in respect to them was permitted by the Constitution for the same reasons that adapt it now to the greatly improved methods of travel and transportation, and in making this adaptation there is no enlarged sense given to the language of the Constitution so long as its inherent purpose—the creation only of public uses—be faithfully observed.

The judge proceeded to show that as a result of the public character of the functions of a railroad corporation, it was not only obliged to furnish facilities and accommodations, but, as an agency of the State, to fulfill the purpose for which it was chartered. As to the peculiar relation of the company as a common carrier, he said :

On other public highways every person may be his own carrier, or he may hire whosoever he will to do that service. Between him and such employé a special and personal relation exists independent of any public duty, and in which the State has no interest. In such a case the carrier has not contracted with the State to assume the duty as a public trust, nor taken power to do it from the State by becoming the special donee and depository of a trust. A good reason may therefore be assigned why the State will not by mandamus enforce the performance of his contract by such a carrier. But the reason for such a rule altogether fails when the public highway is the exclusive property of a body corporate which alone has power to use it, in a manner which of necessity requires that all management, control, and use, for the purposes of carriage, must be limited to itself, and which, as a condition of the franchise that grants such absolute and exclusive power over a user of a public highway, has contracted with the State to accept the duty of carrying all persons and property within the scope of its charter as a public trust. . . . It is the duty of the State to make and maintain public highways. . . . It is not the duty of the State to be or become a common carrier upon its public highways, but it may in some cases assume that duty, and whenever it lawfully does so the execution of the duty may be enforced against the agents or officers upon whom the law devolves it.

It was next shown from various authorities that railroad companies could be compelled to furnish appliances, etc. These obligations, said Judge Davis, are no more binding than is the duty to carry freight and passengers. This duty is, in fact, "the *ultima ratio* of their existence, the great and sole public good, for the attainment and accomplishment of which all the other powers and duties are given or imposed. It is strangely illogical to assert that the State through the courts may compel the performance of every step necessary to bring a corporation into a condition of readiness to do the very thing it is created to do, but it is

then powerless to compel the doing of the thing itself." As to the point that the State is not injured by the refusal of a corporation to perform its duty, and has, therefore, no interest in the question, Judge Davis said, it was no test that the State suffers no direct pecuniary injury. The sovereignty of the State is injured whenever any public function vested by it in any person, natural or artificial, for the public good, is not used or is misused or is abused, and it is not bound to inquire whether some one or more of its citizens has not thereby received a special injury for which he may recover damages in his private suit. Such an injury wounds the sovereignty of the State, and thereby, in a legal sense, injures the entire body politic. The State in such a case as this has no other adequate remedy. The fact that individuals may have private remedies for the damage done them does not preclude the State from its remedy by mandamus. Again, the provisions of the Railroad Act, as amended by chapter 133 of the Laws of 1880, which give corporations power to regulate the time and manner in which passengers and property shall be transported, can not be construed to justify a general or partial suspension of receiving and transporting freight.

Regarding the interference of the strike, the judge said: "According to the statement of the case, a body of laborers acting in concert fixed a price for their labor, and refused to work for less. The respondents fixed a price for the same labor, and refused to pay more. In doing this neither did an act violative of any law, or subjecting either to any penalty. The respondents had a lawful right to take their ground in respect of the price to be paid and adhere to it if they chose, but if the consequences of doing so were an inability to exercise their corporate franchises, to the great injury of the public, they can not be heard to assert that such consequence must be shouldered and borne by an innocent public who neither directly nor indirectly participated in their causes." If, however, it had been shown that a strike of the skilled laborers had been caused or compelled by some illegal combination or organized body which held an unlawful control of their actions, and sought through them to enforce its will upon the companies, and that the latter in resisting such unlawful efforts had refused to obey unjust and illegal dictation, and had used all the means in their power to employ other men in sufficient numbers to do the work, and that the refusal and neglect complained of had grown out of such a state of facts, a very different case would have been presented for the exercise of the discretion of the court as well as of the Attorney-General.

The controversy with the employés of the railroads furnished no valid excuse, in the opinion of the Court, for neglect or refusal to perform their public duties. The conclusion was as follows :

The duties imposed must be discharged at whatever cost. They can not be laid down, or abandoned, or suspended, without the legally expressed consent of the State. The trusts are active, potential, and imperative, and must be executed until lawfully surrendered; otherwise, a public highway of great utility is closed or obstructed without any process recognized by law. This is something no public officer charged with the same trusts and duties in regard to other public highways can do without subjecting himself to mandamus or indictment. We are not able to perceive the difficulties that embarrassed the court below as to the form of a writ of mandamus in such cases. It is true the writ must be specific as to the thing to be done; but the thing to be done in this case was to resume the duties of carriers of the goods and property offered for transportation—that is, to receive, carry, and deliver the same under the existing rules and regulations as the business had been accustomed to be done. There was no necessity to specify what kinds of goods should be first received or carried, or whose goods, or, indeed, to take any notice of the details of the established usages of the companies. It was the people who were invoking the writ, on their own behalf, and not for some private suitor, or to redress individual injuries. The prayer of the petition indicated the proper form of the writ.

The Court of Appeals in October reversed the decision of the General Term of the Court of Common Pleas of New York city in the case of Story against the New York Elevated Railroad Company, and ordered a new trial on the merits. The main point involved was, the right of the owners of property abutting on the line of the elevated railroad to recover damage for the injury done to such property. The question was examined at great length, and the decision was in favor of the right to recover. The conclusions in this particular case were as follow:

1. That the plaintiff, by force of the grant of the city to his grantors, has a right or privilege in Front Street which entitles him to have the same kept open and continued as a public street for the benefit of his abutting property.
2. That this right or privilege constitutes an easement in the bed of the street which attaches to the abutting property of the plaintiff and constitutes private property within the meaning of the Constitution, of which he can not be deprived without compensation.
3. That such a structure as the Court found the defendant was about to erect in Front Street, and which it has since erected, is inconsistent with the use of Front Street as a public street.
4. That the plaintiff's property has been taken and appropriated by the defendant for public use without compensation being made therefor.
5. That the defendant's acts are unlawful, and as the structure is permanent in its character, and if suffered to continue will inflict a permanent and continuing injury upon the plaintiff, he has the right to restrain the erection and continuance of the road by injunction.
6. That the statutes under which the defendant is organized authorize it to acquire such property as may be necessary for its construction and operation by the exercise of the right of eminent domain.
7. In view of the serious consequences to the defendant, we think no injunction prohibiting the continuance or operation of the road in Front Street should be issued until the defendant has had a reasonable time after this decision to acquire the plaintiff's property by agreement or by proceedings to condemn the same.

The general course of the argument in the decision of the court sustained the view that

the State could not grant privileges in the streets of a city which should be inconsistent with their use and enjoyment as such, and that any injury to the value of property or restriction upon its free and full use by the owner, was *pro tanto* a taking of such property for which compensation must be made.

NICARAGUA\* (REPÚBLICA DE NICARAGUA), one of the five independent states of Central America.

STATE OFFICERS.—The President of the Republic is Dr. Adam Cárdenas (successor to Señor Don Joaquin Zavala), inaugurated on March 1, 1883. The Cabinet comprised the following Ministry: Foreign Affairs and Public Instruction, Señor Francisco J. Medina (*ad interim*); Interior, Justice, and Public Worship, Licentiate V. Navas; and Finance, War, and Marine, Colonel J. Elizondo.

The President of the Senate is Señor Don B. Guerra; and the President of the Chamber of Deputies, Señor Don J. G. Bolaños.

FOREIGN REPRESENTATIVES.—The Consul-General of Nicaragua in New York is Mr. Alexander J. Cotheal, and the Consul is Mr. C. R. Flint.

The United States Minister accredited to the five Central American Republics, and resident at Guatemala, is Mr. H. C. Hall; and the United States consular agent at the port of Corinto, is Mr. E. Deshon.

ARMY.—By the terms of the new military code, all male citizens of the republic between the ages of eighteen and fifty-five years are compelled to serve in the army. The strength of this last is reported at 703 rank and file (regular troops), and 9,600 militia.

PUBLIC INSTRUCTION.—To the details given in the volume for 1881, it may here be stated that measures have been taken for the establishment of schools for females at Leon and Granada, under the auspices of the Government. The teachers in these, as is the case in most of the schools throughout the country, will be foreigners. A corps of French instructors was to arrive in the early months of 1883 for the School of *Artes y oficios* (*arts and trades*). The salaries of the director and four sub-directors were fixed at \$3,600, \$1,600, \$1,500, \$1,400, and \$1,300, respectively. The State Library at Managua (the capital) contained, with recent accessions, 10,000 volumes. It is only within the past six years that the central Government has assumed the direction and defrayed the expenses of this important branch, and the expenditure steadily increased in each successive year, having amounted to \$185,816.44 for the biennial period 1881-'82, against \$111,215.90 and \$61,546.99 for 1879 and 1880, and 1877 and 1878 respectively. Military schools were organized in Managua, Granada, and Leon, where the instruction was to comprise reading, writing, arithmetic, and *moral militas*.

\* See "Annual Cyclopaedia" of 1881 for statistics of area, territorial divisions, population, etc.



**FINANCE.**—The national revenue for the biennial period 1881-'82 amounted to \$3,351,766.60, against \$2,436,093.39 for 1879-'80, as stated in the *Cuenta General del Tesoro* published by the Minister of Finance in January, 1883. Of the revenue for 1881-'82, \$1,275,506 were derived from the custom-house; \$779,811 from the spirit-tax; \$447,029 from the tobacco-tax, and \$193,703 from slaughter-houses.

The following table shows the amount and branches of the expenditure for the biennial fiscal period 1881-'82:

Executive, Legislative, etc., Departments.....	\$112,548 42
Ministry of the Interior, etc.....	518,068 99
" War and Marine.....	889,466 89
" Foreign Affairs.....	762,457 82
" Finance.....	1,353,611 87
Sundries.....	109,787 87
Total.....	\$3,240,940 86

Hence there resulted a surplus of \$110,826.24.

Referring to the remarks given in the volume for 1881, on the subject of the national debt, it may not be uninteresting here to transcribe the observation of the Minister of Finance contained in his report presented to the Congress at the end of the year: "The only foreign debt, as you know, that weighed upon the republic, constituted our share of the Federal debt of 1824. The *Memorias* successively laid before you relating to the biennial fiscal periods 1875-'76 to 1879-'80 apprised you that on March 27, 1874, that indebtedness was *settled*, with the legal representative of the holders of the old Central American bonds, at £31,510, and that the state faithfully kept the agreement then made. As I had the honor of informing you in my *Memoria* for 1879-'80, the debt at the end of 1880 was reduced to £4,170 15s. 6d., which remained unpaid because the bondholders did not present their titles, notwithstanding due publication of the agreement, and that the latter had been promptly complied with by the state. It was supposed that the whole of the bonds would, in the course of so long a time after their emission, have been redeemed, but during the biennial period 1881-'82, £1,100 were paid through Messrs. Jimenez & Sons, of London. Thus this debt is brought down to the insignificant sum of £4,011 15s. 6d., which the Government is ready to discharge on presentation of the bonds. Hence the national revenue is not encumbered by any foreign debt."

The home debt, which at the end of 1880 stood at \$920,257.70, has since been reduced to \$426,352.55, as appears from the official report above referred to.

**COMMERCE.**—The exports for the biennial period 1881-'82 were of the total value of \$4,022,317.51, against \$3,708,331.95 for 1879-'80. Chief among the staples sent out of the country were coffee and India-rubber, which together represented 50½ per cent of the entire exports.

The following tables exhibit the quantities and values of these articles exported in the periods therein expressed:

## COFFEE.

PERIODS.	Quantities.	Price.	Value.
	Quintals.*		
1877-'78 .....	86,119.90	\$15 20	\$546,401 99
1879-'80 .....	80,574.69	10 60	855,620 25
1881-'82 .....	120,266.64	9 00	1,082,899 76

## INDIA-RUBBER.

PERIODS.	Quantities.	Price.	Value.
	Quintals.*		
1877-'78 .....	84,993	\$45 00	\$1,662,210
1879-'80 .....	29,729	45 00	1,337,505
1881-'82 .....	29,315	45 00	1,319,175

In view of the progressive depression in the price of coffee in all markets, and the continued decrease in the production of India-rubber, it is apprehended in Nicaragua that the balance of trade, now so largely in favor, will at no distant day be turned against the republic. In the mean time, with increased facilities of transport by rail, the general foreign commerce will be considerably developed, and dye-woods will come to compensate in a measure decay in the coffee and rubber exports.

The imports for the period 1881-'82 were of the total value of \$3,362,544.44, against \$2,936,483.96 for the period immediately preceding. By far the largest portion of the foreign trade is with Great Britain (the exports to which in 1881-'82 were of the value of \$1,263,439.10, and the imports from which \$1,378,674.66), the United States (exports to, \$1,655,960.88—imports from, \$812,906.07), and France (exports to, \$366,374.32—imports from, \$641,307.28). Next in order follow Germany, and the other states of Central America. The trade in the biennial period last past was divided as follows between the several ports of the republic:

Corinto.....	{ Exports.....	\$1,337,669 98
	{ Imports.....	1,262,841 00
San Juan del Norte.....	{ Exports.....	1,556,818 86
	{ Imports.....	1,266,219 91
San Juan del Sur.....	{ Exports.....	408,464 65
	{ Imports.....	309,759 64
Chinendega.....	{ Exports.....	44,925 17
	{ Imports.....	18,866 83

Of these ports, the second is on the Atlantic, the other three on the Pacific coast.

**RAILWAYS, TELEGRAPHS, ETC.**—The railway † now in course of construction was completed and open to traffic as far as Chinendega in 1882; and it is confidently expected that by November, 1884, there will be uninterrupted communication by rail from the Pacific terminus of the line to Managua and Granada, when transit by rail and water from ocean to ocean will at last be an accomplished fact.

Telegraphic communication with Honduras, *via* Paraiso, was established during the year, and with the remainder of the world by the Central and South American submarine cable; and the tariff for dispatches to all points of Central America was reduced to uniformity with that for messages within the republic.

\* Of one hundred pounds.

† See "Annual Cyclopædia" for 1881, p. 662.

Nicaragua joined the Postal Union in 1882.

MISCELLANEOUS.—A steam soap-factory was put in operation in Leon, and bids fair to prove successful.

A treaty of extradition with Colombia was signed on July 3, 1882.

In the United States increasing interest is taken in the consummation of the Nicaragua interoceanic canal route.\* The Legislatures and Boards of Trade of the Pacific States have urged the Government to aid the scheme; subscriptions to stock in the canal were reported as having been made in San Francisco, and it was deemed probable that New Orleans would warmly support that initiative. The promoters of the enterprise announce their determination to prosecute it, spite of puissant adversaries, and to commence work at once in the event of obtaining the three per cent guarantee which they seek from the United States Government.

NON-INTERVENTION AMONG NATIONS, THE PRINCIPLE OF. SOME RECENT VIEWS.—The justice of the intervention or non-intervention of the supreme authority of one nation in the internal affairs of another nation is one of those questions which occur in the science of international law. Its solution in any case which may arise should, therefore, be found in the rules and customs recognized in such law. What, then, is international law? The term "law" is generally defined to be a rule of action prescribed by a superior, and commanding what is right, and prohibiting what is wrong. It is in consequence of this prescription of the superior that the obligation to obedience arises in those on whom the law is imposed, and the justness of the act commanded, and the unjustness of that prohibited, is inferred. With a precise use of language, therefore, it is evident that the term law can not be applied to the science embraced in international law, unless there is a superior to prescribe its rules, and to decide relative to the justice or injustice of actions. How can this take place, since the subjects of international law are sovereign nations, and the matter of its rules consists of their mutual relations and actions? The earliest writers on the science seem to have been aware of an impropriety in the use of such a designation. This is indicated by the titles of their works. Thus Grotius, regarded as the founder of the science, entitled his book "On the Rights of War and Peace." Hobbes afterward wrote "De Cive," or on citizenship; and Puffendorf called his distinguished work "Of the Law of Nature and of Nations." He was followed by Bynkershoek with "Questions on Public Law," Wolf on "The Law of Nations," and Vattel "On the Law of Nations." The term "international law" was introduced by Jeremy Bentham about 1790, and, notwithstanding many objections by others, it has become generally accepted as the appropriate designation of the science. But it would seem that the

most perplexing points which came under the consideration of these writers, were those which treated of the prescriptive authority of a law of nations, and of the obligation to obey it. Both of these are necessary elements of a law, and the position which they occupy in international science is very distinctly stated by Wheaton.\*

THE OBLIGATION OF INTERNATIONAL LAW.—"There is no legislative or judicial authority, recognized by all nations, which determines the law that regulates the reciprocal relations of states. The origin of this law must be sought in the principles of justice applicable to those relations. While in every civil society or state there is always a legislative power which establishes, by express declaration, the civil law of that state, and a judicial power which interprets that law and applies it to individual cases, in the great society of nations there is no legislative power, and consequently there are no express laws except those which result from the conventions which states may make with one another. As nations acknowledge no superior; as they have not organized any common paramount authority for the purpose of establishing, by an express declaration, their international law; and as they have not constituted any sort of Amphictyonic magistracy to interpret and apply that law, it is impossible that there should be a code of international law illustrated by judicial interpretations. The inquiry must then be, What are the principles of justice which ought to regulate the mutual relations of nations—that is to say, from what authority is international law derived? When the question is thus stated, every publicist will decide according to his own views, and hence the fundamental differences which we remark in their writings."

ITS SOURCE OF AUTHORITY.—The views of various writers on the source of authority in international law, and consequently of the extent of its obligatory force, are worthy of notice. Grotius, the earliest of these writers, sought to lay down certain rules of justice which would be binding on men living in a state of nature, independently of any positive laws of human institution. These rules he designated as natural law, and aimed to apply them to mutual relations of separate communities living in a similar state with respect to each other. The substance of international law he thus makes to consist in certain rules of justice, binding upon men in a state of nature. These he designates as "natural law." The source of these rules of justice, and the ground upon which they rest for their obligatory force, are brought forward in his definition of natural law. These rules, he says, are the dictate of right reason, pronouncing that there is in some actions a moral obligation, and in other actions a moral deformity, arising from their respective suitableness or repug-

\* See "Annual Cyclopædia" for 1881, p. 662.

"Elements of International Law," second annotated edition.



nance to the rational and social nature, and that, consequently, such actions are either forbidden or enjoined by God, the Author of Nature. Actions which are the subject of this exertion of reason are in themselves lawful or unlawful, and are, therefore, as such, necessarily commanded or prohibited by God.\*

These views are in conformity with the philosophy of the period in which Grotius lived. They recognize an arrangement and order in all things, of which God is the author, and which is designed to be the immutable order of the universe. Within the province of human actions justice is the rule which secures the observance by them of that order, and injustice expresses the departure from it, and is a violation of the rule. Thus he finds the source or foundation of the rules which should govern the relations of nations to each other to be a part of that basis upon which rests the superstructure of all human actions, and that the authority for these rules is none other than that of the Creator and Author of all things.

But the application of this law of nature, as it is, related to man as an individual, and also to men united in one common society, soon led to a distinction in his views. Thus Wheaton observes: "The term natural law is here evidently used for those rules of justice which ought to govern the conduct of men, as moral and accountable beings, living in a social state, independently of positive human institutions (or, as is commonly expressed, living in a state of nature), and which may more properly be called the law of God, or the divine law, being the rule of conduct prescribed by him to his rational creatures, and revealed by the light of reason, or the sacred Scriptures. As independent communities acknowledge no common superior, they may be considered as living in a state of nature with respect to each other, and the obvious inference drawn by the disciples and successors of Grotius was, that the disputes arising among these independent communities must be determined by what they call the law of nature. This gave rise to a new and separate branch of the science called the law of nations—*Jus Gentium*."†

This law of nations Grotius distinguished from the natural law by the different nature of its origin and obligation. These features of the natural law have been stated, but the origin and obligation of the law of nations he attributed to the general consent of nations. This distinction has been also expressed by designating the one as the natural and the other as the positive or voluntary law of nations.

Neither Hobbes nor Puffendorf expressed an approval of this derivation of the origin and obligatory force of the positive law of nations. The former, in his work "*De Cive*," says: "The natural law may be divided into the natural law of men, and the natural law of states,

commonly called the law of nations. The precepts of both are the same; but since states, when they are once instituted, assume the personal qualities of individual men, that law, which when speaking of individual men we call the law of nature, is called the law of nations when applied to whole states, nations, or people."\* To this view Puffendorf implicitly subscribes, saying that "there is no other voluntary or positive law of nations properly invested with a true and legal force, and binding as the command of a superior power."† Here the issue is directly made between authority and obligation arising out of *consent* of nations, and the same arising under the law of nature. After denying that there is any positive or voluntary law of nations founded on the consent of nations, and distinguished from the natural, Puffendorf admits that the usages and comity of civilized nations have introduced certain rules, for mitigating the exercise of hostilities between them; that these rules are founded on a general tacit consent, and that their obligation ceases by the express declaration of any party, engaged in a just war, that it will no longer be bound by them.

Bynkershoek, who wrote later than Puffendorf, says: "The ancient juriconsults assert that the law of nations is that which is observed in accordance with the light of reason, between nations, if not among all, at least certainly among the greater part, and those the most civilized. According to my opinion, we may safely follow this definition, which establishes two distinct bases of this law, namely, reason and custom."‡ It will thus be seen that the sources and obligation of international law are, by this writer, laid upon the bases of reason and custom. The views thus far presented, with the exception of the latter writer, represent international law as a branch of the science of ethics, and consider it as the natural law of individuals applied to regulate the conduct of men in societies, called states. Wolf, the next writer, separated the law of nations from that which treated of the duties of individuals. He says: "Since such is the condition of mankind that the strict law of nature can not always be applied to the government of a particular community, but it becomes necessary to resort to laws of positive institution, more or less varying from the natural law, so in the great society of nations it becomes necessary to establish a law of positive institution more or less varying from the natural law of nations."§ He then advances the fiction of a great republic or commonwealth of nations upon whose assent this law of positive institution is supposed to be founded, and thus derives its origin and obligation.

Vattel, who followed Wolf, differs from him in the manner of establishing the foundations

\* "*De Cive*," chap. xiv, § 4.

† Puffendorf, "*De Jure Naturæ et Gentium*," lib. ii, cap. iii, § 23.

‡ Bynkershoek, "*Quest. Jur. Pub.*" lib. i, cap. x.

§ Wolfius, "*Jus Gentium*," Pref., § 3.

\* Grotius, "*De Jur. Bel. ac Pac.*," lib. i, cap. i, § x, 1, 2.

† Lawrence's Wheaton, Part I, chap. i, pp. 2, 3.

of the voluntary law of nations. He says: "I do not find the fiction of such a republic either very just or sufficiently solid to deduce from it the rules of a universal law of nations, necessarily admitted among sovereign states. I do not recognize any other natural society between nations than that which nature has established between all men. It is the essence of all civil society that each member thereof should have given up a part of his rights to the body of the society, and that there should exist a supreme authority capable of commanding all the members, of giving to them laws, and of punishing those who refuse to obey. Nothing like this can be conceived or supposed to exist between nations. Each sovereign state pretends to be, and in fact is, independent of all others. Even, according to Mr. Wolf, they must all be considered as so many free individuals, who live together in a state of nature, and acknowledge no other law than that of nature itself, and its Divine Author."\* According to his view, the law of nations in its origin is nothing but the law of nature applied to nations; yet, he says, there are many cases in which the natural law does not furnish the same rule of decision between state and state as would be applicable between individual and individual. It is the art of accommodating this application to the different nature of the subjects in a just manner, according to right reason, which constitutes the law of nations a particular science.

The two last-named writers, together with Grotius, recognize an application of the natural law, to regulate the conduct of nations in their intercourse with each other. This is designated by the former as "the necessary law of nations," because they are absolutely bound to observe it, as it is binding upon states as upon individuals; while Grotius designates it as "the internal law of nations," being obligatory upon nations in point of conscience. By others this is termed "the natural law of nations," which is immutable, and founded on the nature of man. To embrace the whole science of international law, the first-named writers, Wolf and Vattel, recognize a voluntary law of nations, arising from the presumed consent of nations, a conventional law resulting from compacts between particular states, and a customary law resulting from usage between particular nations. The obligation of the voluntary law, Vattel establishes in a manner unlike Wolf, as above mentioned.

The view of Heffter, a writer of distinction, is that the law of nations is a law common to all mankind, which no people can refuse to acknowledge, and the protection of which may be claimed by all men and by all states. He places the foundation of this on the incontestable principle that wherever there is a society there must be a law obligatory on all its members; and hence deduces the consequence that there must be likewise for the great soci-

ety of nations an analogous law. Again, he says: "Its sanction (the law of nations), or the obligation of all men to respect it, results from the moral order of the universe, which will not suffer nations and individuals to be isolated from each other, but constantly tends to unite the whole family of mankind in one great harmonious society."\*

An eminent French writer on this science† questions the propriety of using the term "law of nations" as applicable to those rules of conduct which obtain between independent societies of men. "There can be no right where there is no law, and there is no law where there is no superior; without law, obligations, properly so called, can not exist; there is only a moral obligation resulting from natural reason." M. Hautefeuille, an admirable French writer, says: "From the primitive law, that is, from the natural law, flows the entire international law. Its principles are not only to be found in Grotius and Hobbes, but they are in the hearts of all men. The natural law executed with exactitude, would secure to all nations the tranquil exercise of all their rights, that is to say, peace and happiness."‡

Mr. Wheaton gives us this definition of the science: "International law, as understood among civilized nations, may be defined as consisting of those rules of conduct which reason deduces, as consonant to justice, from the nature of the society existing among independent nations; with such definitions and modifications as may be established by general consent."§ The sources of international law, he says, are text-writers of authority, treaties of peace, ordinances of particular states, adjudications of international tribunals, written opinions of official jurists, and the history of wars, negotiations, and other transactions relating to the public intercourse of nations. His view of the obligatory authority of these rules of conduct must be sought for in his definition and general remarks. Thus of the text-writers of authority he says, "Without wishing to exaggerate the importance of these writers, or to substitute in any case their authority for the principles of reason, it may be affirmed that they are generally impartial in their judgment." Here the authority is ascribed to the principles of reason, or rather, principles deduced by reason. In the definition he makes the substance of international law to consist of those rules of conduct which reason deduces from the nature of society. The distinctive powers of man are reason and free-will; the former to deduce the truth, and the latter to choose or accept it. The great principle that determines the character of all the actions of men toward each other, is justice. When, therefore, Mr. Wheaton requires in

\* Heffter, "Das europäische Völkerrecht," § 2.

† Rayneval, "Institutions du droit de la nature et des gens," note 10 du 1er liv., p. 8.

‡ "Des droits et des devoirs des nations neutres en temps de guerre maritime."

§ Lawrence's Wheaton, Part I, cap. i, p. 26.

\* Vattel, "Droit des Gens," Preface.



his definition that the rules of conduct shall be deduced by reason, as consonant to justice, he assigns to them the highest authority which can be ascribed to intellectual approval. But if the investigation be pursued, and it be asked, whence the simple deductions of reason consonant with justice derive authority over human actions, the answer will show that it is from the same source from which the natural law derives its authority, viz., the Creator of all things.

In another place he presents the following remark: "Grotius would, undoubtedly, have done better had he sought the origin of the natural law of nations in the principle of utility, vaguely indicated by Leibnitz, but clearly expressed and adopted by Cumberland, and admitted by almost all subsequent writers as the test of international morality. But in the time when Grotius wrote, this principle, which has so greatly contributed to dispel the mist with which the foundations of the science of international law were obscured, was but very little understood. The principles and details of international morality, as distinguished from international law, are to be obtained not by applying to nations the rules which ought to govern the conduct of individuals, but by ascertaining what are the rules of international conduct which, on the whole, best promote the general happiness of mankind."\* Here it would appear as if utility was the principle by which to test the right or wrong in the actions of nations toward each other; commending that which is useful as right and promoting the general happiness of mankind, and prohibiting that which is not useful as wrong and injurious to the general happiness of mankind. But there can be no incompatibility between true utility and true justice. Why, then, in one instance say that the principle of utility is admitted as the test of international morality, and in another instance say that international law consists in those rules of conduct which reason deduces as consequent to justice from the nature of society, etc.? If the precepts of international law are consonant to justice, then the observance or the violation of them determines their international morality, which in no sense can be determined by utility, although it may be consonant with it.

Turning now to the Italian school of writers, one of the most eminent† presents this view: "If the society of nations is governed by natural law, the atoms which compose it must be absolutely equal. Men under the scepter of nature are all equal, and accordingly commonwealths are equal if the international state be one of nature. The proposition that independent communities, however different in size and power, are all equal in the view of the law of nations, has largely contributed to the happiness of mankind, though it is constantly threatened by the political tendencies of each successive

age. It is a doctrine which probably would never have obtained a secure footing at all if international law had not been entirely derived from the majestic claims of nature by the publicists who wrote after the revival of letters."

The opinions of these writers on international law, thus briefly presented, serve to show upon what an uncertain foundation the authority and obligation of its precepts seem to rest. Sovereign states being considered as the subjects of its commands, there is not to be found anywhere a state so supreme as to prescribe, with the authority of a superior, rules of conduct to others. Indeed, their relations to each other seem to resemble very much those of an individual in social life, who is said "to be on his good behavior." If, however, he violates the tacitly approved courtesies and rules of society, he is pronounced "disorderly," and is approached by a representative of an authority which has the right to command and the power to enforce.

Nothing like this exists among sovereign states, but various substitutes have been suggested or attempted, such as a permanent congress of states, a confederation of states, etc., all of which have been temporary in their nature, and without efficient obligatory force. The conference of certain European states at Constantinople during the year, relative to the affairs of Egypt, presents an illustration of the highest condition to which a practical application of international law has attained. The arbiters of Europe assembled to decide the fate of Egypt, not upon the principles of justice, but upon such terms as shall preserve the peace of Europe.

VIEWS OF THE ITALIAN SCHOOL.—But, without pursuing this aspect of the question further, it will now be interesting to turn to Italy and consider the views there advanced. Italy, consisting of several distinct and independent governments, as is well known, has been "unified," as it has been termed, under the government of the strongest. A revolution so extreme in one aspect, a consolidation so vast in another; a confederation of such incongruous elements in one sense, a subjugation so entire in another, embracing as it does a church asserting universal and more than human moral authority, must, in whatever manner it is viewed, elicit a multitude of interesting questions. None of these is it here proposed to notice, but simply to present those declared principles of international law under which it is maintained that all these events can come to pass in perfect accord with the principles of justice, and be secured in permanence consistently with the principles of honor and rectitude among states. "The change," said Cavour, "which has just been accomplished in Italy, has not only been inspired by the principle of liberty, like the English Revolution of 1688; it has been founded on the right of nationality, which gives it additional force."\*

\* Part I, chap. 1, p. 5.

† H. S. Maine, "Ancient Law," chap. iv.

\* *Parlement Italien, séance du 9 Avril, 1861.*



BEGINNING OF THE SCIENCE.—The latest of Italian writers assumes that the science of international law really began to exist after the Peace of Westphalia in 1648, and was one of the fruits produced by the changes made under the religious revolution of the preceding century.\* The emancipation of humanity from Catholic theocracy placed man at the head of secular affairs, and released his free-will from all restraints except those which were approved by his personal reason. This constituted liberty as an essential right of human personality. "In fact, a man is not a person if he is not free; and Aristotle called slaves half-men, because they are deprived of personal liberty.† Liberty, however, we do not understand in the cloudy sense given it by many philosophers. In our meaning, liberty is that which was defined by the great Revolution of France in the last century; it consists in doing all that is not injurious to others. And so long as one man does not impair the liberty of another man, so long does he exercise his right; for right, according to us, is the assemblage of those conditions under which the free-will of every one may co-exist with the free-wills of all the others. Now, because the state, as Plato used to say, is man considered on a grand scale, the same principles, which do for individuals, do for states; and international law is nothing else than a system of principles by the means of which the free-will of one state may co-exist with the free-wills of the other states; in other words, it is the right of nature applied to the mutual relations of states among themselves. According to our view, the state is the people organized to unity: *Civitas*, as Cicero said, *est constitutio populi*; *populus autem est, non omnis coetus quoquo modo congregatus, sed coetus multitudinis juris consensu et utilitatis communione sociatus*. Hence it is natural that in every state there should be a *suprema potestas* which governs the multitude, a sovereign power which is the expression of the will of the organized multitude. Now, when a state is governed by a supreme power which habitually exercises its sovereignty over the people without being subject to any foreign control, then there is autonomy and independence, which consists in a spontaneous, habitual, and complete sovereignty.‡ Any one, therefore, who will meddle in the internal affairs of a state violates its independence and autonomy; non-intervention, therefore, as a principle, is nothing else than the respect due to the independence and autonomy of states. And as personal liberty is for the individual, so independence is for a state the most precious good. Without this there can be neither moral dignity nor power, nor prosperity, nor glory in the state, nor respect for it on the part of others. A state without independence is a carcass—a body in which life is wanting. Non-interven-

tion, therefore, as a principle, is just and lawful, because it is the observance of the liberty of states; wherefore it must be scrupulously respected, even when to violate it might be advantageous; for justice must at all times prevail over utility; and, besides, history informs us that the violation of justice, although it may have been profitable for a short time, has ultimately proved detrimental. For us, therefore, utility has a value only when it is supported by justice. Consequently, every independent state is free to do at home what it pleases; and, even if it violates justice, provided its acts do no injury to others, it is fully sovereign, because there is no power superior to states, and no state has the mission of executing the avengements of justice, outside the limits of its own territory."

EXPLANATION.—A few words in explanation are necessary to set forth the view here presented. The writer says: "Now, because the state, as Plato used to say, is man considered on a grand scale, the same principles which do for individuals, do for states; and international law is nothing else than a system of principles by the means of which the free-will of one state may co-exist with the free-wills of the other states; in other words, it is the law or right of nature applied to the mutual relations of states among themselves."

The prime natural rights of man are life, liberty, and the pursuit of happiness, and "for the protection of these rights governments are instituted."\* That is, among the highest rights of man, is the right to his life, and to the safety and liberty of his person. This right is often designated as sacred; as if it were, on the one hand, a possession of the highest value to the individual, and, on the other, beyond the reach of violability by any one. The man has the universally recognized right of peaceable possession and enjoyment, which is attended by the corresponding duty obligatory upon every other man, not to interfere with or disturb this possession. But the right of peaceable and secure possession on his part is a right of non-interference and non-intervention as regards all others. For right, says this writer, "is the assemblage of those conditions under which the free-will of every one may co-exist with the free-wills of all the others." Therefore the right of non-interference and non-intermeddling by others is no less a right than that of peaceable and secure enjoyment, if, indeed, the one expression is not the equivalent of the other.

SOURCE OF THE PRINCIPLES.—Now it is from this source that the writer derives the principles of international law; or, rather, with him, these are the principles of that science. He says: "The same principles which do for individuals, do for states; and international law is nothing else than a system of principles by the means of which the free-will of one state may co-exist with the free-wills of the

\* "Rivista Europea," April 1, 1882, p. 58.

† Ibid., March, p. 1008.

‡ On the import of independence, see Austin's "The Province of Jurisprudence Determined," Lecture vi.

\* American Declaration of Independence, 1776.



other states; in other words, it is the right (law) of nature applied to the mutual relations of states among themselves." The obligatory force of this law is, therefore, the same as that which obliges a man not to interfere with the life or liberty of his neighbor. Asserting the equal sovereignty and independence of all states, it follows that to each belongs the right of non-intervention or non-interference as against all others. France, subsequent to her first revolution of 1789, when threatened by successive coalitions of the great European monarchies, relying on the independence of nations, contended for non-intervention as a right.\* Understood as an expression of the independence of states, the principle of non-intervention is not denied by any publicist; and even the famous "Holy Alliance" of European sovereigns, which was a negation of that principle, while it violated the principle, professed to respect the independence of nations.

NON-INTERVENTION EXPLAINED.—But an explanation of the term "non-intervention," as here used, is necessary. "In order rightly to define the question of non-intervention," says this writer, "we begin with giving the true meaning of the word *intervention*; and this is the more necessary, because intervention is often spoken of in various senses, and many times in a sense different from that which it ought to have: 'According to the strict signification of the word, to intervene would express the interposing of one or more powers between two peoples at variance, or between the contending parties of one and the same people. And this is understood of armed, or, at all events, coercive intervention; inasmuch as the non-coercive and simply amicable is never and in no case unlawful, and in most cases it is even wished for and welcomed. In diplomacy, however, the modern use of that word makes it more properly to signify the interfering of one or more powers in the internal affairs of an independent state, whenever the condition of those affairs is likely to prove of serious detriment to others.'† We intend by intervention to designate meddling in the internal affairs of a nation, let this be amicable—which, though caused by the brotherhood of peoples, is yet unlawful and humiliating—or let it be coercive; for either form of it constitutes an intermeddling. And from the idea we assign to the word *intervention*, it will follow that the principle of non-intervention is applicable to all those cases in which a foreign state will interpose in the relations existing between government and governed, between citizens and citizens of one and the same nation."

WHEN IS A NATION RESPONSIBLE FOR ITS ACTS?—Nations being thus constituted, each equal in sovereignty and independence, and as possessing an absolute right of non-interven-

tion on the part of others, it may be asked, When is a nation responsible for its acts? Then only is a state responsible for its acts when these impair the right of others; and then there is injury done to the right of others when this right is so just and evident that the violation of it is manifestly prejudicial, or seriously dangerous, to the power concerned. Thus, a state, whose existence should be made to depend on the injuries done to others, has no right to exist; and intervention there is just, because the independence of any one must never be exaggerated to the point of becoming injurious to the independence of others. Such states, therefore, as should intend to live by piracy, would have no right to exist. In like manner, a state which should purpose to found for itself a universal monarchy, or declare its intention to impose its own principles on other states by the force of arms, would violate the independence of others, and should be punished.\*

Great caution is required here, says the writer, and he maintains that this extreme remedy should be adopted only when no satisfactory diplomatic explanations are given, and when a state provokes agitation in other countries and violates their independence to such a degree as to render an armed intervention for their very existence indispensable. "But so long as such declarations of principles are only poetical aspirations, so long as foreign states have the power of repressing agitations within their own limits, they must abstain from invading the territory of a threatened state, and not act as the potentates of Europe did in the last century, when they invaded France under the pretext of a platonic declaration issued by the French constituency—that it would with arms support those people in foreign countries who should demand their freedom. This intervention was unjust, and has been the source of many great evils, because that declaration did not constitute a grave danger to the existence of the intervening states, as they possessed within themselves the power to suppress any rising of their own people. We hold that intervention is to be used only as an extreme remedy under circumstances of the most serious character. In this case it is not a violation of our principle. For, certainly, that state which proclaims universal monarchy, or intends to enforce on another people the observance of its own principles, does not exercise a right belonging to it, because it oversteps the limits of its own territory; and hence it follows that the intervention is just—nay, according to our views, there would be in this case only legitimate defense on the part of foreign states, but no intervention, as no internal affair of the threatening state is interfered with."

\* If the end of the last and the beginning of the present century saw all Europe combined against France, it was not on account of the internal changes which France thought necessary for her own political and civil reformation; but because she attempted to propagate, first, her principles, and afterward her dominion, by the sword.—Lawrence's Wheaton's "Elements," p. 122.

\* Lawrence's Wheaton's "Elements," etc., p. 120.

† "New European Public Right," chap. ix, § iv.



"In like manner, every meddling of one State in the affairs of another state for the purpose of protecting its own interests or the interests of those who live under its administration, provided these interests are based on justice, is legitimate defense, not at all contrary to the principle of non-intervention, which remains firm and unshaken."

**OBJECTIONS TO THE PRINCIPLE.**—Having shown the justice and lawfulness of the principle sought to be established, the effort is then made to refute all objections by an examination of the various cases of intervention. In relation to forms of government, it is held that the independence of states being admitted, it is natural that each gives to its own government the form answering to the wishes of the people who are to live under it; and each has the fullest right of molding itself into a republic rather than a monarchy, or into a representative rather than an absolute monarchy. Everybody is master of himself in his own house; and since national sovereignty is absolute and inalienable, and there is no superior authority, it follows that every nation, either by itself or through its representatives, is the sole and supreme judge in the choice of its own head, and of the manner in which its sovereign powers are to be constituted, organized, and exercised: governments are made for the nations, not nations for the governments. This is the theory—that all government originates with the people; whatever form they please, they may give to its administration. Referring to the author of the "New European Policy," this view is presented: "The liberty possessed by every nation to govern itself internally has two very different aspects. The one regards the dictates of what is true and good; the other the lawful relations with foreign states. With reference to the first aspect, certainly it is unlawful for a people to act against the principles of moral and political reason; as to the second, however, it appears manifest that within its territorial limit a state may make a good or ill use of its own right, in the same manner as the possessor of an estate may squander away his own property and sink from wealth to mendicacy. If the loss and the guilt remain within the erring state itself, and if nothing goes out beyond its frontiers, except the erroneous example and influence, the legal confines of nations are still untouched, and the external autonomy remains inviolable. A different conclusion would be reached if a people agitated by intestine discords and insurrections should send into the neighboring provinces secret emissaries, arms, money, prints, books, etc. Such a half-armed and perfidious manner of propagating its own maxims does certainly break the reciprocal faith of nations, and furnishes a right to repel it by the use of means sufficient to the end. But what else was done at Lubiana and Verona, except clothing with legal and solemn forms an armed propaganda of certain principles? What did the Austrian

army teach by forcibly entering into Piedmont, the Romagna, and Naples, except the unlimited sovereignty of princes and the irreparable servitude of subjects? What did the Duke of Angoulême intend to demonstrate to the Castilian people with his bayonets, but this most singular proposition—that it was unlawful for Bonaparte to spread by force beyond the Pyrenees the maxims of 1789, but that it was just and lawful for the Bourbons to spread by force the doctrine of divine right? Hence, either the independence and the internal sovereignty of states do not exist, and can receive a limit from the will and pleasure of some foreign states; or it must be admitted that the right of armed intervention can never be used where that sovereignty, although it makes a wrong use of itself, yet does not in fact exceed its territorial limits; and what it sends out beyond them is only the invisible and incoercible action of example and opinions, only the distant echo of words, the mysterious union of moral sympathies."\*

Again, it is argued by the writer that governments which are the best, and thoroughly based on justice and reason, are not disheartened at the sight of contrary examples; for, to false and subversive ideas they oppose sound and preservative ones: nay, the sight of a tumultuary multitude elsewhere, with its excesses of all sorts, would prove most useful to teach moderation and instruct their own people, as the sight of the drunken slave was a lesson of sobriety to the Spartan. England, separated from French soil by a narrow strait of the sea, was undisturbed by the half-republican, half-social revolution at Paris in 1848. Holland suffered nothing from it; Belgium nothing—a narrow country, without frontiers, and almost inclosed within France, but governed by the best institutions. Hence, either the example, the opinions, the principles of your neighbor are corrupt and fatal; and in this case it will suffice to show their wickedness and turpitude, even if this were not soon enough demonstrated by their effects; or the work of your neighbor and the maxims he inculcates agree with truth and justice, and, in that case, your intervention for the purpose of overthrowing and trampling them under foot is as wrong and unlawful as it is powerless and ineffectual. Why does a dogma of truth and justice acquire with time and exert a much greater power, by itself alone, than all the armies, the policies, and the statutory decrees can give it?

**A METAPHOR EXPLAINED.**—To the lively metaphor urged by certain diplomatists a thousand times, to represent the injustice of the principle of non-intervention—viz., that when a neighbor's house is on fire, one does not hesitate and wait, but runs and enters, with every instrument he can get, to extinguish the flames as soon as possible—they say we act in like manner when the terrific conflagration of rev-

\* Mamiani's "New European Public Law," chap. xl.



olutions is burning near us, and threatens our own houses. To this objection it is replied that a less unfit comparison would be to say that, in your neighbor's house, they have begun to lead a licentious and disorderly life; much different, at all events, from your own. You at once perceive that you have no reason and no right whatever to intrude upon your neighbor, and compel him to change his morals and his ways of life, since he works no injury or loss to your property; does not associate with your children, for the purpose of seducing and corrupting them; does not, in a word, trespass on that limit within which the private liberty of citizens is maintained co-existently. In fact, some aver that those changes and revolutions, on account of which the autonomy of states is broken up, are a destructive and devouring fire; whereas others deny it, and consider it a better metaphor to say that political changes and revolutions must be likened rather to those vehement but momentary remedies by the means of which nature cleanses, transforms, embellishes, and reordains its works.

INTERVENTION WHEN ASKED FOR.—To the question whether the intervention when asked by the state itself is just and lawful, it is said in reply that many writers have acknowledged it to be just in a certain manner. But apart from this consideration it is urged as necessary, in the first place, to see whether the intervention is asked for by the general will of the state, or by the governing power, or by the people respectively; for, when government and people unite to request the intervention of a foreign state, they perpetrate an injustice, because they abdicate their own independence and sovereignty. The general will is that which ought to prevail, and an appeal to foreign mediation is unnecessary for accomplishing its ends. If the intervention is called for by a people against their sovereign, it is equally unjust. A people that is pressed down by a tyrannic government rebels, and a civil war ensues, in which each of the opposite parties has a supreme power and a standing army; is there a necessity of recognizing in them the character of belligerents, and of intervening in favor of either? To this question it is said, in reply, that if the principle of nationality is involved in the case—that is, if the contestants are of distinct nationalities—the intervention is just and holy; but if the case presents the spectacle of a truly civil war between citizens of one and the same nation, the intervention is unjust and wrong. Upon this question international science is divided. Grotius, Vattel, Heffter, and Phillimore admit the intervention. The Italian school denies it. They say that foreign intervention is useless, because, to decide upon internal affairs, belongs to the people; and as civil contests are confined to internal affairs, all intermeddling with them must be abstained from; that one of the contending parties will win which has

the greater strength and number of adherents. Neither is intervention in favor of the people against a tyrant just; for the army, which defends the king, is nothing else than the armed nation, and when the people justly rebel the soldiers will of course fraternize with the insurgents. It is impossible to suppose that a man, in order blindly to follow the commands of his superior, will unsheath his sword, and push it against the breast of his father, or brother, or son.

VIEWS OF NATIONALITY.—Where the principle of nationality is involved, it is above admitted that the intervention would be just and holy. This admission undoubtedly follows from the special views entertained of the subject of nationality, and upon them is principally based the division which separates the Italian school from other writers. Some notice of these views should here be taken. It has been said by the distinguished Carutti that "the ill use of nationalities is the most enormous crime man has perpetrated on earth. In the eyes of those who look sharply into the past, slavery and the so-called castes are nothing but the consequence of the conquests of nations over nations. The generations who succeeded to the first invaders have received their ancestors' inheritance and maintained that servitude of individuals which had been originally imposed on the conquered people as a means of domineering over them. National personality is as much sacred as the individual, and the dominion of one nation over another nation is to the same extent iniquitous as the dominion of one man over another man; neither long possession, nor compacts, nor benefits conferred can justify it."\* The chief objection urged against the principle of nationality, to the end of denying it, has been brought by those who declared that it was a thing of difficult determination. It is said, in reply, that there are certain characters which, notwithstanding their imperfections, do yet constitute nationality. Not to speak of race, which embraces many nationalities, we have the language, which is the most potent factor of nationality; wherefore Fichte's saying is asserted to be always true—"the tongue is the nation." Some exceptions to the contrary notwithstanding, peoples who speak the same language have a feeling of their common origin, a feeling of brotherhood and affection, because language is the most powerful bond that unites men among themselves. History, manners, laws, religion, and territory are potent means of constituting nationality. But the greatest force of cohesion which becomes the most potent factor of nationality, and which joins again all the separate and dispersed parts of a nation, is the sentiment of political consolidation, and the consciousness of nationality which has been set down as a basis of this principle by Mancini, to whom has been ascribed the honor of having reformed "the international-

\* "De principiis del governo libero," lib. iii, cap. i.

al right (law)" by resting it upon the principle of nationality.\* Viewing this sentiment as true and just, and that every people has the right to form a state by redeeming itself from a foreign servitude, the question of intervention is presented. That is, the question whether or not it is lawful to intervene in favor of a people that rebels against foreign oppression and claims the right of constituting itself into an autonomous and national state. The Italian school, professing the principle of non-intervention in an absolute manner, acknowledges the justice and lawfulness of intervention in this case. In explanation, it is said that "there is not true intervention in the case; the question involved is not an internal one, but international. In fact, where there is not a constituent moral unity and a sameness of native country, there are virtually many states, and not one state; and therefore, if foreign armies rush in to help a people which sword in hand is justly demanding that autonomy of which it has been robbed, they do not properly make an act of intervention, because they do not use violence to meddle in the internal affairs of an identified political community, but to defend the cause of one nation against its external adversaries, and to give brotherly succor to a people that is unable to constitute itself into a national state."

INTERVENTION BY TREATY.—Again, it is asked if foreign intervention in the affairs of a state is not just and lawful, when it takes place by virtue of a treaty or convention? This is acknowledged to be right by the greatest number of writers.† In answer to the question, however, it is said by the Italian writers that treaties and conventions are contracts made between state and state, and are therefore subject to the same principles which regulate contracts. Now, the civil law declares null all contracts made against morality and against the laws. So treaties are null before the laws and morality, which contain a violation of morality and of justice; which impair the essential rights of states, one of which is their independence. Therefore those which allow foreign intervention are null. If they are made by the general will, it is sufficient to say that no nation has the power to abdicate its own autonomy; if the treaties are made by the sovereign, they are likewise null, because he, by constitutional right, has not the power to make treaties without the approbation of Parliament. If the sovereign is an absolute prince, he has not the power to make personal treaties in his favor and against the people whose chief and representative he is. Those treaties whereby the independence of a small and feeble state is guaranteed on the part of all the nations of Europe against the avidity of a powerful neigh-

bor, are not to be condemned. For, in such case, there is no intermeddling in internal affairs, nor in the form of government.

INTERVENTION AGAINST MERCENARY TROOPS.—Again, it is asked, If a government uses foreign mercenary troops as a means of support to act despotically against its people, whether foreign intervention in favor of the people and against the government is lawful? It has been shown that the intervention of foreign troops in favor of a sovereign against a people is unjust; therefore a foreign state may rightly step in and defend this people for the purpose of repelling the external force brought in contrary to the law of nations. So, likewise, the intervention of a state in favor of a people that rebels against the sovereign who is protected by mercenary troops, is just, because it does not aim at violating the autonomy and independence of the state.

UNION OF STATES.—Again, it is asked, if one state can unite itself with another, and out of two independent states constitute one state; and if in this case a foreign state may impede the annexation. The reply is, that "when there are many states politically independent of each other, yet belonging to one and the same nation, and they are willing to unite together for the purpose of constituting themselves into one national state, it is evident that they not only have the full right to do so, but by doing it they also integrate their own personality, and supply a natural want of the peoples to form an individual total, called national state." Therefore it is said that nothing could be more unjust than that a foreign government should impede the fusion of several states into one national unity, because every nation has the innate right of constituting itself into one single state. It is also declared to be an example of the scrupulous observance of the principle of non-intervention, when the constitution of nationality is involved which was given in 1860, when, by virtue of this principle, proclaimed by Napoleon III and by the Government of England, Italy was enabled to constitute its national unity by the annexations to Piedmont, under the dynasty of Savoy, of the other independent Italian states. Therefore it is concluded that when the principle of nationality is involved, all annexations are just and lawful, and the principle of non-intervention must be strictly observed.

ANNEXATIONS.—Annexations based on nationality have of late prevailed extensively in Europe. The basis of the present kingdom of Italy was unity of race, which was declared to be confirmed by popular sentiment, as indicated by universal suffrage. This principle was the plea for the incorporation with Sardinia, in 1860-'61, of Tuscany, Parma, and Modena, the greater part of the Pontifical states, and also of the late kingdom of the Two Sicilies. The conquest of Lombardy from Austria, and its cession to Sardinia by France, had previously been made. On the same

\* Prolegations "On Nationality as the Foundation of the Right (law) of Nations," published by Professor Pierantoni.

† Vattel, Book II, chap. xii, § 196; Klüber's "Laws of Nations," §§ 45-58; Marten's "Summary of the Laws of Nations," § 13; Wheaton, chap. i; Heffter, § 46; Ahrens' "The Philosophy of Right," § 138.



ground of national autonomy the cession of Savoy and Nice by Sardinia to France, by treaty in 1860, was defended. The King, in his proclamation to the inhabitants, said, "I could not forget that the great affinities of race, language, and customs render your relations with France more intimate and natural."\* The people of Germany long entertained the idea of a government based on a common nationality, with Prussia as the leader, before the consummation actually took place. At that period, also, the principle of nationality was invoked for uniting the conterminous peoples of common race in Turkey and Austria. It is also asserted that the annexation of one state to another, when, besides the proximity of territories, they have in common between them the same interests, sentiments, origin, traditions, wants, and manners, would be equally just and lawful. But it is a condition that such annexations should be the effect of the free-will of the two peoples. "For, if these annexations were willed, instead, by one only of the two peoples, and submitted to by the other, then, there being violation of the liberty of a people, every intervention for hindering such annexation would be just and lawful, because it would be a defense of the weak against the strong." It was alleged by those who resisted the annexation of some of the states of Italy, that an honest and impartial expression of the approval of the people had not been obtained.

**THE CASE OF SUCCESSION.**—Again, it is asserted that, in questions relating to successions, all interventions are unlawful, except when their purpose is to impede the fusion of nationalities; that intervention in favor of vassal states is just, because it is an anomalous alliance rather than an intervention; that it is just in favor of colonies which aspire to their own independence, also in the affairs of armaments; political equilibrium is combated as nothing else than a name employed to cover the ambition of some governments.

**THE CASE OF RELIGION.**—In the case of religion the following view is presented: "Any intervention having for its object to impose religion upon a people is unjust and unlawful, because it impairs the right which every man has to follow that which he believes to be true. Nor can we admit as just the intervention against a state which persecutes the followers of a given religion among its own people. . . . What shall we say of all those foreign interventions in favor of the papacy, which, under the pretense of defending religion, were stifling all liberty in peoples subject to the Catholic theocracy? In the eyes of right, such interventions are unjust and unlawful, because neither the defense of religion (which was in no wise threatened), nor the need of propping a political power adverse to the religious character, odious to the peoples themselves over whom it dominated, are means that justify foreign in-

tervention in the internal affairs of a state. But time has given justice its due. The famous breach of Porta Pia, on September 20, 1870, has avenged the oppressed: the political power of the papacy has fallen down for ever. Rome has become the capital of resuscitated Italy, and for ten years she has offered to the world the grand spectacle of her being the seat of a new kingdom, and the center of the Catholic faith. Liberty sits by religion: the spiritual independence of the Pontiff, more than to the law of the guarantees, a law of purely internal and not of international character, is intrusted to the honor and loyalty of the Italian people, who well know how to discriminate the sentiment of its own nationality and autonomy from the respect due to the religious liberty of the supreme Pontiff, and to the faith of their ancestors."

**THE ROMAN QUESTION.**—One might be led to suppose from the sentiments of this extract that\* "the political popedom (temporal power) has vanished before the supreme right of the Italian nationality," and that the well-known "Roman question" had ceased to exist. But to allow such a conclusion to remain would be to mislead readers. Some explanation, therefore, is here necessary. After the Government of Sardinia resolved to effect the "unification of Italy," and had prepared herself by temporization to cope with her powerful adversaries, she found her greatest obstacle to success was the Roman Catholic Church. This was an organization recognized by the European nations as sovereign and independent. It occupied a territory in Italy that had long been subject to the civil jurisdiction of its head, who received and sent forth ambassadors, and it was thus admitted to the rank of a civil power among nations. As such civil power it was the feeblest of all. But it likewise claimed to be a spiritual power, and asserted that it was organized and commissioned by the divine Redeemer of all men to be his representative on the earth, and to teach, with power to effect a reconciliation between him and them in their rebellion against him. These claims were recognized and respected and obeyed by the princes and subjects of most of the civil powers of Europe, among which were Sardinia and the states of Italy. Between the temporal and the spiritual there has been a perpetual conflict, and the question was now agitated in the public mind, why resort should not be made to civil liberty as the means by which to terminate the conflict between church and state. Count Cavour, then the Prime Minister of Sardinia, confiding in the omnipotence of political liberty, after mature reflection, launched forth the famous formula, "*A free church in a free state.*" He made it the compass by which to guide his policy.† In the memorable session of Parliament preceding his death he offered it as a

\* Martens, par Samwer, "Nouveau recueil," tome xvi, p. 2, p. 541.

\* Mancini's Praelations, "The Life of Peoples in the Humanity," p. 214.

† "Rassegna Nazionale," of Florence.

guide to his successors; for himself it was necessary to provide by moral means for the liberty and spiritual independence of the Pope. It was the duty of Italy, entering at whatever moment into Rome, to provide such guarantees that there would be no occasion to regret the disappearance of the temporal power. Hence arose the general idea of guarantees to be accorded to the Pope, when the government of liberty should regulate the relations of church and state upon the ruins of royal prerogatives and the sovereign jurisdiction of the civil power in ecclesiastical affairs. After a few months Cavour died, and Ricasoli succeeded him. "The latter with his friends desired in the first place to make a serious trial of the formula of Cavour, and to conclude the religious question on such conditions that the Curia—as they believed—would be, in the end, obliged to admit that the situation of the Church in Italy was better than in all the other countries of Europe."\* But Ricasoli fell in 1862 under the furious blows of the radicals, and with him went all projects relative to Rome and the Curia. In 1866 a new ministry was formed, and he was again at its head. He was now convinced that, before taking a step, Italy should make known to Europe the real position in which she wished to place the Pope. The situation which ought to be made for the papacy should be regulated by a law † promulgated in ecclesiastical right and freely approved by the Italian Government. ‡ The retreat of the French troops would be the signal for the occupation of Rome by the Italian Government, with the assent or, at least, with the tacit approbation of Europe, satisfied beforehand by the law thenceforth to be called the law of guarantees. The form of a law on the plan stated above was presented to Parliament, and received with so much opposition as to produce a ministerial crisis. Two ministers retired in February and March, 1867, and Ricasoli followed in May. Four years later new political conditions obliged the Government to recede, and the project or bill so sharply rejected in 1867 was accepted in 1871 with the addition of Title I. The events of 1870 offered an easy occasion to the Italian Government to occupy Rome. It was done on September 20th. The cabinets of Europe observed a mysterious silence. They maintained their ambassadors around the Pope, a fact which, contrary to the hopes of the revolutionary element, signified that they considered him to be a sovereign. They acted then as if nothing had taken place on September 20th, although the Pope, since that date, had practically not been king. What, then, should the Italian Government do, and especially its prime minister Sella? The papacy presented itself before his face, surrounded by the College of Cardinals, representing Catholicity whole and entire, surrounded like-

wise by a European diplomatic corps, which persisted in seeing in it a sovereign; it was free and independent of all human power. Hence it was required to make a virtue of necessity and to inscribe, spontaneously at least in appearance, in the general laws a recognition of the sovereign dignity of the Pope, and to confer on him all the attributes of royalty. This first principle being adopted, it was necessary by enactment to legalize its consequences: recognize the authority and independence of the Sacred College, which, on the death of the Pope, could provide a successor and serve him as a full senate during his life. It was likewise necessary to recognize formally the European diplomatic corps accredited near the Holy See.

The first part, or Title I, of this law of guarantees, so far as relates to the manner of execution, was then, and continues, a general internal act, but in its practical application it is necessarily clothed with the complete character of international law. All that applies to the Pope, the Sacred College, the diplomatic corps resident near the Holy See, bears the character of relations with a foreigner. Whether willingly or not, it is a fact that Italy has desired by that law to reassure foreign powers against the fear which they had conceived lest innovations would be brought in their relations with the Holy See, in consequence of the presence of the Italian Government at Rome. In reality they have kept the right to send, to change, to suspend their ambassadors near the Pope, and the ambassadors are recognized, treated, respected, not only in the former pontifical state, but in all the kingdom, in the same manner as the diplomats accredited near the King. By this law Italy has willed, likewise, that the chief of Catholicity shall preserve his former independence, remaining a stranger to the kingdom, or, as one says, that he should preserve his extra-territoriality in his own palace, or without, even to the frontiers of the country, as if, although deprived of political power, he remained truly sovereign. By this law, again, Italy has willed that the foreigner who should be called to the cardinalate, or to any other position of ecclesiastical or pontifical administration, acquires *ipso facto* all the rights of an Italian citizen, so that he can be neither punished nor censured by reason of his execution of orders of the Pope and in the normal fulfillment of his functions. "If this is not matter of international law, let some one say in what international law consists."\*

OTHER CASES OF INTERVENTION.—Let us return to our subject. All intervention in relation to commerce is also asserted to be unlawful, unless it is based on treaties. So all intervention in civil wars, and in favor of humanity, is condemned. These conclude the cases passed under consideration. Without stopping to consider the various conflicts among European nations brought forward by this writer, in illustration of the principles he has endeavored to

\* "Deutsche Rundschau," of Berlin.

† Le droit publique ecclésiastique.

‡ "Rassegna Nazionale."

\* "Rassegna Nazionale."



establish, it will be sufficient to present the following extract from his concluding remarks: "In the first part of our work we have shown that the principle of non-intervention represents the autonomy and liberty of nations, and that it is the fundamental principle of the law of nations. We have seen that, whatever diplomatists and statesmen say of it,\* notwithstanding, it is the absolute rule of right which admits of no exceptions, save only in the case of defending a people's nationality and independence; in which case there is a brotherly succor, or an anomalous alliance, if one may so term it, rather than a true intervention. In the second part we have examined into the various cases of intervention that have occurred in modern times, condemning and justifying in conformity with these principles.

"Now we must answer an objection which naturally presents itself before us. It will be said, Where is the worth of the principles for which you contend, since history informs us that they are constantly violated and that international law has a purely moral value, it being deprived of the power of compulsion? We answer that the intrinsic virtue of a principle is not destroyed by the force which opposes or retards its practical application; that the science of right has performed the duties of its mission when, resting upon evident demonstrations, it declares successful injustice to be iniquitous, and, holding it up to the execration of the world, tends at least to impede its propagation and lessen its mischievous influence on the destinies of mankind. There is certainly no tribunal superior to states, which might punish the violations of the principles of international law; but we call to mind as profoundly true the maxim of the German poet, 'The world's history is the world's tribunal!' Yes, history is the people's tribunal; and it is in its immortal pages we see the fatal effects produced by the violation of the principle of non-intervention; the bloody wars of succession, the dismemberment of Poland, the terrific republican wars and the wars of Napoleon, the tragical end of Maximilian, are eloquent examples which show the justice of the principle of non-intervention, and the pernicious consequences produced by the violation of it. If there is no supreme tribunal, however, which might enforce the observance of this principle, it is the duty of a wise and enlightened policy to observe it and to cause it to be observed."

NORTH CAROLINA. STATE OFFICERS, ETC.—Governor, Thomas J. Jarvis; Lieutenant-Governor, James L. Robinson; Secretary of State, William L. Saunders; Treasurer, John M. Worth; Auditor, William P. Roberts; Superintendent of Public Instruction, John C. Scarborough; Attorney-General, Thomas S.

Kenan. United States Senators, Zebulon B. Vance and Matthew W. Ransom. Representatives in Congress (elect), Walter F. Pool, First District; James E. O'Hara, Second District; Wharton J. Green, Third District; William R. Cox, Fourth District; Alfred M. Scales, Fifth District; Clement Dowd, Sixth District; Tyre York, Seventh District; Robert B. Vance, Eighth District; Ridsen T. Bennett, State at large. The apportionment act of Congress, in conformity with the census of 1880, gave North Carolina nine members of the House of Representatives—one more than the number of her Representatives in the Forty-seventh Congress. As the Legislature was not in session to define the limits of the additional congressional district, and as there was no statutory provision for the election of a Congressman by the "State at large," the question arose as to what course should be pursued so that the State would have the full representation to which she will be entitled in the Forty-eighth Congress. The Governor requested the opinion of the Attorney-General, his "constitutional legal adviser," which that officer gave, to the effect that there must be "an express warrant of authority to hold a legal election"; that the election law of 1876-'77 makes no provision for holding an election "for a member of Congress to be chosen by the votes of the State at large," but says that the State shall be divided into eight districts, designating the counties embraced in each; that, though the power to make or alter the regulations made by the State for holding elections of Senators and Representatives is among the powers delegated by the Constitution to the Federal Government, that power was not exercised by the apportionment act, which only says that, if the State be entitled to an additional Representative, he *may* be elected at large, and if the number be decreased, the whole delegation *shall* be elected at large, unless the Legislature has provided, or shall otherwise provide, before the time fixed by law for the next election of Representatives; that the apportionment act has not undertaken to designate the "places" or prescribe the "manner," or "make" any "regulations" for holding such election; that the State statute fails to meet either contingency—an increase or decrease in the number of Representatives; that a change in the number necessitates a corresponding change in the election law, as well in the case of a gain of one member as if the number had been decreased, and that, for a legal election, the machinery or details must be provided by the law itself, and not supplied by inference or implication. "The fact that the law authorizes the election of officers *therein named*, by general vote, furnishes the best reason that it does not apply to officers *not therein named*." He therefore recommended that an extra session of the Legislature be called, as any action would be "illegal unless authorized by some positive statute." On the receipt of this opinion, the

\* Wheaton and Calvo, writers on international law, and Guizot and Chateaubriand, politicians, say that, in this matter, principles of certainty can not be set down, and that all depends upon the circumstances of the practical policy.

Governor addressed a communication to the Council of State, composed of the Secretary of State, Treasurer, Auditor, and Superintendent of Public Instruction, by whose consent alone he is authorized to convene the Legislature in extra session, which was as follows:

STATE OF NORTH CAROLINA, EXECUTIVE DEPARTMENT,  
RALEIGH, March 7, 1882.

*To the Honorable the Council of State.*

GENTLEMEN: The question which I submit to you to-day is, "Shall the Legislature be convened in extra session?" Upon this question I ask your advice, and, if your advice be in favor of the call, what time will you suggest as likely to work the least inconvenience to the members?

The extraordinary occasion which, in my opinion, makes an extra session necessary, is the new apportionment act giving North Carolina nine members of the House of Representatives of the Congress of the United States. Since and before the passage of this act I have given the matter a thorough and close investigation, and I can find no authority or machinery for the election of a member of Congress by the State at large. But desiring to get authoritative information on this subject, I asked the Attorney-General for his official opinion, intending to let his decision of the question be my guide. My letter to him and his reply are herewith submitted.

My constitutional legal adviser having decided that there is no machinery by which a member of Congress for the State at large can be elected, there is nothing else left for me to do but to ask your consent and advice to call the Legislature together to provide the necessary legislation. However others may feel and act, I am not willing that North Carolina, by any act or omission of mine, shall be deprived of any part of her representation and influence in the national Legislature, nor am I willing to take part in holding an election which I am advised by the law officer of the State is without authority of law. I am, very respectfully,

Your obedient servant,

THOMAS J. JARVIS.

The Council of State—the Secretary of State dissenting—decided that it was not necessary to put the State to the heavy expense of an extra session, and that the election of the ninth member of Congress by the popular vote of the entire State would be a legal election. Three of the Democratic members of the present Congress concurred with the majority of the Council in opposition to the opinion of the Attorney-General, the views of the Governor, and the protest of the Secretary of State. The question is a nice one. Does the act of the Federal Congress which merely declares that in case a State be entitled to an additional representative, he *may* be elected at large, amount to such a change or alteration of the regulations of the State as to the "times, places, and manner of holding elections for representatives," as does away with the necessity of any State law on the subject?

The political campaign of this year was unusually animated. Opposed to the regular Democratic party were the Republicans and "Liberals," the latter consisting chiefly of so-called Independent Democrats, who had become dissatisfied with their party and had coalesced with the Republicans to defeat it. The "County Government" Bill and the "Prohibition" Bill, passed by Democratic Legisla-

tures, were the points against which the coalition directed their main attacks. By virtue of authority granted by the Constitution of 1875 the Legislature of 1877 passed an act providing that the county magistrates should henceforth be elected by the Legislature, and the county commissioners, who levy the county taxes and administer the county affairs generally, should be appointed by the magistrates, instead of, as theretofore, elected by the people of the various counties. The reason for this change was that in the eastern portion of the State the negroes, without property or intelligence, controlled the elections, and were piling up a mountain of debt which threatened to crush the people. The western section, though comparatively free from this grievance, joined the east and passed the present "county system," as a matter of financial salvation. The Republicans and Liberals charged that the obnoxious law deprived the people of the right of local self-government, but the popular voice was outspoken in defense of the system as a choice of evils. The Prohibition (of liquor) Bill, which was submitted to the people and defeated by a large majority a year ago, was charged to be a Democratic measure, and, though no longer a living issue, was used, probably, as a sample of the evil designs of which the coalition supposed the Democrats to be capable, in order to defeat the regular Democratic nominees. Of the nine members of Congress, including the member from the State at large, the coalition only succeeded in electing two opponents of the "Bourbon" Democracy. The following table, showing the comparative expenses of the State government during two years of Republican administration and two years of Democratic administration, which was used effectively during the campaign, reconciled a great many voters to the alleged anti-Republican spirit of the "county system":

	1869.	1870.	1880.	1881.
Legislature.....	\$191,702	\$161,491	\$17,695	\$56,259
Contingencies.....	76,506	57,884	13,607	21,215
Salaries.....	30,628	37,286	20,096	20,060
Judiciary.....	54,130	53,302	83,218	37,920
Public printing.....	34,652	34,503	7,901	12,763
Total.....	\$387,048	\$349,406	\$97,597	\$148,217

The leading issues in the congressional canvass made by the Democratic party, were the internal revenue taxation and the conduct of the internal revenue officers, and the reckless extravagance and corruption of their opponents.

FINANCIAL CONDITION.—The act of March 4, 1879, "to compromise, commute, and settle the State debt," expired by the prescribed limitation of the law on January 1, 1882. It provided for the redemption of the principal of the bonded debt therein recognized, as follows:

Bonds issued prior to May 20, 1861, 40 per cent. exclusive of \$100,000 of old bonds surrendered under a special act by the Albemarle and Chesapeake Canal Company..... \$5,477,400 00



Brought forward.....	\$5,477,400 00
Bonds issued since the close of the war, by authority of acts passed before the war, and registered certificates of the Board of Education, 25 per cent.....	8,261,045 00
Bonds issued under the funding acts of March 10, 1866, and August 20, 1868, 15 per cent....	3,888,600 00
Total.....	\$12,627,045 00

Bonds have been redeemed as follows:

First class, as described above, 40 per cent....	\$4,244,500 00
Second class, at 25 per cent.....	2,164,045 00
Third class, at 15 per cent.....	2,412,200 00
Total.....	\$8,820,745 00

New 4 per cent bonds have been issued as follows:

For bonds at 40 per cent.....	\$1,697,800 00
For bonds at 25 per cent.....	541,011 25
For bonds at 15 per cent.....	361,880 00
Total.....	\$2,600,641 25

In this amount are included certificates issued in exchange for fractional sums less than \$50, still outstanding, and receivable for new bonds, in amounts of \$50, \$100, \$500, and \$1,000.

The old bonds yet outstanding and fundable under the act are—

Redeemable at 40 per cent.....	\$1,282,900 00
Redeemable at 25 per cent.....	1,097,000 00
Redeemable at 15 per cent.....	1,476,400 00
Total.....	\$3,856,300 00

Should the General Assembly, at its session in 1883, extend the compromise act of March 4, 1879, the actual and prospective debt of the State will be:

Actual debt bearing 4 per cent interest.....	\$2,600,641 25
Prospective debt bearing 4 per cent interest....	988,870 00
Actual debt bearing 6 per cent interest.....	1,720,000 00
Prospective debt bearing 6 per cent interest (old bonds now being renewed).....	1,075,000 00
Total.....	\$6,384,511 25

The receipts of the "Public Fund," which is charged with all moneys derived from taxation and other ordinary sources of revenue, and credited with all disbursements of whatever character, not connected with the Educational Fund, for the fiscal year, ending September 30, 1882, amounted to \$755,881.44. From these are to be deducted \$42,000, tax on fertilizers, appropriated to the exclusive use of the Department of Agriculture; \$59,500 interest on mortgage bonds of the Western North Carolina Railroad; and \$29,460 paid by the receiver of the dividends accruing to the State from stock in the North Carolina Railroad, and applicable to payment of interest, October 1, 1882, on new "construction" bonds, making a total of \$130,960, and which, being deducted from \$755,881.44, leaves \$624,921.44 available revenue. The total disbursements for the fiscal year amount to \$629,112.37. Deducting from this amount \$43,500 on account of Agricultural Department, and not properly a part of the general fund, and \$58,555 paid as interest on the mortgage bonds of the Western North Carolina Railroad, the expenses legitimately chargeable to the fiscal year amount to \$527,057.37. The balance to the credit of the Pub-

lic Fund at the close of the fiscal year was \$254,189.78, made up as follows:

Accumulated funds to pay interest on the 4 per cent consolidated debt of the State.....	\$224,086 96
Amount received from receiver of North Carolina Railroad.....	29,460 00
Amount applicable to general expenses.....	642 82
Total.....	\$254,189 78

This large balance to the credit of the interest fund is due to the fact that nearly \$1,000,000 of the new 4 per cent bonds remain unsued because the redemption of the old bonds under the act of March 4, 1879, was discontinued on January 1, 1882, by the expiration of the time prescribed for the exchange.

The revenue act of the State authorizes a tax of six cents on the hundred dollars' worth of property, for the general fund for the support of the State government; a tax of eleven cents on the hundred dollars of property, for the support and completion of the asylums for the insane; a tax of five cents on the hundred dollars of property for the support of convicts and construction of the penitentiary, and a tax of six cents on the hundred dollars of property for the payment of interest on the public debt, making a total tax of twenty-eight cents per hundred dollars on the assessed value of property, the aggregate value of which, as shown by the report of the State Auditor, published November 30, 1882, amounts to \$167,738,639. The estimated expenses of the State for each of the years 1883, 1884, and 1885, are:

General Assembly, sessions 1883 and 1885, mileage and per diem, each.....	\$55,000 00
Executive Department.....	21,500 00
Judiciary.....	37,000 00
General expenses, including printing, contingencies, etc.....	50,000 00
Penitentiary.....	75,000 00
University of North Carolina.....	12,500 00
Oxford Orphan Asylum.....	5,000 00
Normal schools.....	8,000 00
Institutions for Deaf, Dumb, and Blind.....	36,000 00
Support and completion of Insane Asylums.....	140,000 00
Total.....	\$440,000 00
Interest on outstanding 4 per cent bonds.....	104,000 00
Total.....	\$544,000 00

As is the case in many other Southern States, the valuations of real and personal property for taxation in North Carolina are far below the cash value, and very unequal in the various counties. The limit of taxation fixed by the Constitution is 66 $\frac{2}{3}$  cents on the \$100 worth of property. Of this, as already stated, 28 cents are required to pay the expenses of the government, and the remaining 38 $\frac{2}{3}$  are needed to pay the expenses of the counties. If the property throughout the State were equitably and uniformly assessed, it is generally believed the aggregate value of the real and personal property in the State would be fully \$300,000,000, which would either allow a large reduction of the rate of taxation, or furnish a surplus which could be devoted to educational purposes, and thus largely increase the number and efficiency of the public schools. It is estimated that there are 490,000 educable children in the

State, and the amount raised by State taxes for education has never exceeded \$500,000.

A final and satisfactory settlement has been made, and is now being executed, of the question so long in dispute between the State and the bondholders of the North Carolina Railroad. The State is the owner of \$3,000,000 of stock in that road; private stockholders own \$1,000,000. To pay for this stock the State issued her bonds in 1853-'54-'55, to run for thirty years, at 6 per cent, and to secure their payment pledged the dividends accruing on her stock for the payment of the interest, and the stock itself for the payment of the principal. In 1866 \$205,000 of these bonds were taken up, leaving outstanding \$2,795,000. The road was leased to the Richmond and Danville Railroad in 1871, for  $6\frac{1}{4}$  per cent on the capital stock; and soon after a suit, known as the Swasey suit, was commenced in the Federal Court to subject the rental arising from the lease to the payment of the interest on the bonds. A receiver was appointed, who has found the dividends to be sufficient to pay the interest. Under an act of the Legislature of 1879, providing for the adjustment of that part of the State debt incurred in aid of the North Carolina Railroad, three commissioners were appointed to make the settlement. After many delays from various causes, a plan of adjustment was agreed on, and signed by bondholders representing \$2,000,000, and by the commissioners, by which the old bonds are to be exchanged for new bonds of equal amount, with interest payable semi-annually at the rate of 6 per cent per annum, the surplus of the dividends on the stock owned by the State, after paying the interest on the new bonds, to be used as a sinking fund for the payment of interest on such of the old bonds as have not been presented and proved in the Federal Court, and then for the payment of the interest and principal of the new bonds. Up to December 31, 1882, the Treasurer had issued, under this agreement, \$1,720,000 new bonds. It is expected that the remaining outstanding old bonds will be exchanged during the next year, and thus a valuable property will be saved to the State, without imposing any additional tax on the people. By this settlement the bondholders "rebate to the State \$240 of interest on each bond delivered for renewal."

It is feared that an attempt will be made in the Federal courts to enforce the payment of the \$22,000,000 "special-tax" bonds, fraudulently issued by the "carpet-bag" government in 1868 and 1869, and since repudiated by the laws and Constitution of the State. The holders of these bonds, unable to surmount the constitutional provision that a State can not be sued by a citizen of another State, propose to transfer, or have already transferred, their claim to the State of New York, who may bring suit, it is supposed, in the Supreme Court of the United States, the Legislature of New York having passed a law to that effect.

STATE INSTITUTIONS.—The catalogue of the University of North Carolina, at Chapel Hill, shows 199 students in attendance during this collegiate year, of whom eight were taking a post-graduate course. In addition to the regular courses of study, a "teacher's course" of two years was established during the year, which is designed to fit young men to become competent teachers either in public or private schools. It would be very well if other colleges at the South would follow this good example, for nothing—not even want of money—retards public education in the Southern States so much as the want of properly qualified teachers. The university is growing in numbers and usefulness, and rapidly recovering from the severe shocks it sustained from the war, and the misrule of several years after the war had closed. The institution received during the past year \$12,000 from the State. The completion of the railroad between Chapel Hill and Raleigh, which took place in May, was enthusiastically celebrated by a large concourse of people. Davidson College, under Presbyterian, and Trinity College, under Methodist, control, though patronized by all religious denominations, have been well attended, and have done good work in the higher education of the people. The latter institution sustained a heavy loss in the death, on November 7th, of Dr. Braxton Craven, LL.D., president of the college. The other colleges, academies, and high-schools throughout the State are all said to be in a prosperous condition. There are 817 churches in the State, of the estimated aggregate value of \$789,025. During the year \$84,402 have been expended for building and repairing churches.

THE COMMON SCHOOLS.—The school law, passed at the last session of the General Assembly in 1881, has been found to work admirably. The means requisite to carry it out, so as to fulfill the design of its framers, can not be supplied by the State under the existing Constitution, which limits the authority of the Legislature to levy taxes to \$2 on the poll and  $66\frac{2}{3}$  cents on the \$100 worth of property. When the expenses of the State and county governments are paid, the sum left to be appropriated to the support of the public schools is small, as compared with what is needed, and which the people seem to be ready to contribute. The State Board of Education made arrangements early in the year for opening five normal schools for whites, and later for an equal number for colored pupils. These schools have been well attended, and promise to do much good.

The Institution for the Deaf, Dumb, and Blind, according to the report for the two years ending December 31, 1882, provided during those years for 105 deaf and dumb and 91 blind inmates, who have been judiciously instructed in several useful handicrafts, as is shown by the satisfactory operation of the shoe, broom, and mattress shops in the me-



chanical department of the institution. There is a separate department for colored people where, during the two years, 38 deaf and dumb and 22 blind pupils have been received and taught. This, it is claimed, was the first institution of the kind at the South to make provision for colored pupils.

**THE PENITENTIARY.**—On the large buildings under construction for several years, and which have cost a large sum of money, satisfactory progress toward completion was made during this year. The main prison was sufficiently advanced in December to allow of the transfer of the convicts heretofore confined in old, temporary buildings, to the new, well-ventilated and well-heated cells; \$110,000 have been expended upon this institution during the past fiscal year. The total cost is upward of \$1,000,000. As far as possible the convicts are made to earn their support, and thus relieve the tax-payer, by employing them wherever practicable on the public works. The old and decrepit and female convicts work on a farm near Raleigh, and their work has proved to be moderately profitable. On November 1st there were 996 convicts in the State; of these, 137 were white and 859 colored.

**THE ASYLUMS FOR THE INSANE.**—If the necessary appropriations be made to complete the buildings now in process of construction for the accommodation of the insane, no State will have provided more liberally than North Carolina for the treatment of this unfortunate class. Besides the large asylum near Raleigh, containing on November 1st 265 patients—140 males and 125 females—the Western Asylum at Morganton is now partially completed, and will be ready to receive patients early in the next year, and an asylum for insane colored people is being already built at Goldsboro, now containing over 100 patients. So much has insanity increased within the past quarter of a century, that it is doubtful whether even these three institutions will be adequate to treat the number of insane in the State. There were over 1,000 lunatics on November 1st, cared for in the various counties. During the year the State has expended \$158,000 on these asylums. The Oxford Orphan Asylum has sheltered, fed, clothed, and educated during the year 145 orphan children, at a cost of \$14,032.66, to which the State contributed \$5,000. The institution is under the auspices of the Masonic fraternity, who manage and control it, and contribute liberally to its support.

**RAILROADS.**—The completion in May of the railroad from Wolf Creek to Paint Rock, makes the connection continuous between the North Carolina system of railroads and the East Tennessee, Virginia, and Georgia trunk line. The branch just finished crosses the French Broad at two places—handsome iron bridges, 440 feet apart, spanning the river at both points. The masonry-work of these bridges is all of black granite. The road from Asheville to Pigeon River is completed. The grad-

ing is finished to the top of Balsam Mountain, and the work between that point and the Cowee Tunnel, sixteen miles farther, is progressing. The tunnel is on the west bank of the Tuckaseegee River, and takes the road through Cowee Mountain, and then down the Tuckaseegee to Charleston, Swain County, crossing the Tennessee River near the mouth of the Nautehala, thence along that stream to Red Marble Gap, and, cutting through the mountains and striking the head-waters of Valley River, runs down that water-course to Murphy. The engineering difficulties in cutting through Balsam, Cowee, and Nautehala ranges are very great, rendering progress at these points apparently slow.

The act passed by the last Legislature providing for the sale of the State's interest in the Cape Fear and Yadkin Valley Railroad failed to be carried out because conditions were attached to it with which the purchasers refused to comply. The State owns \$555,000 worth of the stock. The grading is almost completed to Walnut Cove, the work being done by convict-labor. The Atlantic and North Carolina Railroad from Beaufort to Goldsboro, ninety-five miles, was leased last year for thirty years to the Midland North Carolina Railroad Company for \$40,000 per annum, on condition that the lessees should build a road from Goldsboro to Salisbury. Having only built twenty-two out of one hundred and fifty miles of this road, and suspended further work, the Atlantic Company have declared the lease forfeited, and have taken steps to recover possession. The State has a nominal interest in the Atlantic road to the amount of \$1,266,000. This stock is worth less than ten cents in the dollar, and subject to a lien amounting to \$248,000, with accrued interest since August, 1868. It is proposed that the next Legislature shall authorize the State to surrender her interest to the Midland or any other company, on condition that the road from Goldsboro to Salisbury or Charlotte be completed as rapidly as practicable. There is a strong party in the State in favor of the creation of a Railroad Commission, and when the Legislature meets in January a bill for that purpose will be introduced and, it is believed, will be adopted. The suits brought by the State Treasurer against the Wilmington and Weldon, Seaboard and Roanoke, Raleigh and Gaston and Petersburg Railroad Companies, to recover taxes levied by the Legislature, have been decided in favor of the State. The question involved was whether the provisions of the charters of the defendant companies exempting them from taxation, protected them from the taxes levied by the General Assembly in the acts of 1877 and 1881. Their charters exempted their property from taxation, but the taxes in question were levied on their *franchise*, not upon the corporate *property*. The Raleigh and Seaboard Railroad has been completed this year from Williamston to Tarboro, and the work between the latter point



and Raleigh is in progress. The railroad from Halifax to Scotland Neck, twenty miles in length, was finished in April, opening a fine section of the State.

The commemorative celebration of the Mecklenburg Declaration of Independence took place at Charlotte, on May 20th. The streets were fairly decked with flags and banners, filled with citizen soldiers in bright uniforms, and at least 20,000 people from the surrounding country. Governor Jarvis and his staff, Senators Vance, Ransom, Wade Hampton, and Bayard were present. The Mecklenburg Declaration was read by Senator Ransom, and Senator Vance introduced the orator of the occasion, Thomas F. Bayard, of Delaware. The address was enthusiastically received, especially the sentiments contained in the following extract:

I wish I could impress upon you, gentlemen, and not upon you only but upon our fellow-countrymen everywhere, the fatal fallacy and mischief that underlies and inheres to every proposition to use the money of the people—drawn from them by taxation, the powers of their government, the force of their government, under any name or pretext—for any other than really public objects and ends. I include the maintenance of public honor, dignity, and credit, the protection of American citizenship everywhere, among the just objects for the exercise of governmental powers; but I wish to deny here and everywhere, now and at all times, the rightfulness of involving the welfare and happiness of the 50,000,000 men, women, and children of the country, whether by laying taxes upon them which are not needed for the support of their government, or paying bounties and subsidies to maintain lines of private business which are too unskillfully or unprofitably conducted otherwise to sustain themselves, or promising the presence of our fleets or armies, or risking the issue of peace or war, or shedding the blood of our soldiers and sailors in aid of schemes of private greed or personal ambition under the guise of claims foreign or domestic.

The fisheries of North Carolina constitute a large and valuable industry. Upward of 5,000 persons, 100 vessels, and 3,000 boats are employed in the business. The average annual product is upward of 30,000,000 pounds of fish, worth between \$800,000 and \$900,000. The catch of the "alewife" is larger in the waters of North Carolina than in those of any other State, being a little under 16,000,000 pounds annually. The shad-fisheries yield about 4,000,000 pounds, and, being marketed earlier, are worth more than those caught elsewhere. The mullet-fisheries are second only to those of the Florida coast. Of terrapins upward of 40,000 are caught annually, of the estimated value of \$11,000. Owing to the success which has attended the operations of the fish-hatching commission, this industry may be expected to grow rapidly in extent and value.

**BANKS.**—There are fifteen national banks in the State, with a present capital of \$2,501,000, and a surplus fund of \$474,956. The individual deposits at the last statement amounted to \$2,889,789, and other deposits to \$190,840; the loans and discounts to \$4,738,012.

**A GENERAL REVIEW.**—The year 1882 has

been in the main a prosperous one. The public health has been generally good. In material progress, railroad construction, mining, and agriculture, the State has made a healthy though not rapid advance. The educational system has widened its sphere of efficiency, and has gained in popular favor. The financial condition is sounder and more hopeful than it has been for years, because directed and controlled by honesty, good faith, and economy in those who receive and pay out the people's money. The cotton-crop is undoubtedly short. The price is low, and the expense of making it was heavy. The uncertainty as to what Congress will do as to the tobacco-tax, has disorganized the tobacco-trade, but when the question is once settled, either one way or the other, it is hoped that the industry will revive. The area planted in cotton is becoming greater every year, and the improved culture is annually increasing the yield per acre. It is becoming, however, a serious question whether nine cents per pound will cover the actual cost of production, without taking into the account any allowance for interest on the investment. The Geological Museum, recently established and arranged in the building of the Department of Agriculture, gives a gratifying view of the resources of forest, field, and mine of the "Old North State." The exhibit of iron-ores from fifteen counties is large in number and variety. Handsome specimens of gold, silver, copper, and plumbago are to be seen. The display of white and colored marbles, both rough and polished, of which the supply is said to be inexhaustible, is very attractive. Specimens of kaoline, mica, asbestos, marl, talc, granite, and sandstone are also shown. The exhibit of woods is remarkably fine, comprising 112 different varieties. The manufacturing enterprises, the number of which is increasing largely from year to year, are prosperous and remunerative. The people are more industrious and progressive. North Carolina used to be called "the turpentine State," and later "the peanut State." Now she is known for her cotton, rice, grain, woods, minerals, tobacco, and manufactured goods, and her intellectual progress keeps pace with her material growth. There are, it is reported, 3,802 factories in the State, worth \$13,045,639, employing 18,109 hands, who are paid \$2,740,758 in wages, and who work up materials worth \$13,090,937, and produce goods worth \$20,095,037. The manufacture of pine-wood oil (an industry confined exclusively to Wilmington) has grown largely in proportions and importance. The oil is distilled from "fat pine" or "lightwood" at the rate of eighty gallons of oil to one cord of the wood. Its chief use is for the preservation of wood, especially for the timbers of ships and boats. It is becoming an article almost of as much importance as tar and turpentine. The receipts of produce at the port of Wilmington, for the year ending December 31st, were: Cotton, 123,572 bales;



spirits of turpentine, 88,669 casks; rosin, 476,- 72,070 barrels. The exports for the same 367 barrels; tar, 72,654 barrels; crude turpen- time were:

EXPORTS.	Lumber.	Spirits of turpentine.	Rosin.	Tar.	Crude turpentine.	Cotton.	Peanuts.
	Feet.	Casks.	Barrels.	Barrels.	Barrels.	Bales.	Busbels.
Domestic.....	31,217,061	84,620	105,414	55,988	2,179	72,624	58,885
Foreign.....	9,074,085	53,276	888,904	15,507	130	67,708	.....
Total.....	40,291,146	87,896	444,318	71,445	2,309	140,332	58,885

Among the articles of export from Wilmington the amount of peanuts is worthy of notice, having reached 58,885 bushels. The estimated value of the exports is \$10,000,000. A comparison of the American tonnage of steamships and sailing-vessels shows how rapidly the coasting transportation has been absorbed by steamers. The tonnage of Wilmington for 1882 is as follows:

No.	American.	No.	Foreign.
	Tons.		Tons.
78	Steamships..... 73,591	152	Barks..... 58,890
10	Barks..... 3,589	43	Brigs..... 11,426
11	Brigs..... 2,923	11	Schooners.... 1,048
198	Schooners..... 51,381		
297	Vessels..... 131,434	206	Vessels..... 71,364

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OBITUARIES, AMERICAN. ALLEN, Professor WILLIAM A., born March 27, 1808; died August 29, 1882. After graduating from Bowdoin College in 1833, he was called to teach Latin and Greek in the Methodist Seminary at Cazenovia, N. Y., remaining there about two years, when he took charge of the High School at Augusta, Me. In 1836 he went to Carlisle, Pa., where he was Professor of Natural Philosophy and Chemistry in Dickinson College, and in a few years assumed that also of English Literature and Philosophy. He remained there about thirteen years. In January, 1850, he was appointed President of Girard College in Philadelphia, which position he held until the end of his life, with the exception of a few years spent in retirement, and as President of the Pennsylvania Agricultural College. He was a writer of considerable thought, and the long and important office he held at Girard College testifies to his great abilities as an instructor. He at one time was President of the American Bible Society; this, however, did not interfere with his college duties. His health had been declining for some years, and for several months before his death he was incapacitated for active duty.

COLEMAN, LYMAN, D. D., born June 14, 1796, in Middlefield, Mass.; died March 16, 1882, at Easton, Pa. President Coleman graduated at Yale College in 1817; he then held for three years the post of principal in the Latin Grammar School at Hartford, and was at the expiration of that time made a tutor in Yale College, having among his pupils many who subsequently became eminent. Mr. Coleman studied theology, and for seven years was pastor of the Belchertown (Mass.) Congregational Church. After a year or two spent in foreign travel, and study in Germany, he devoted himself to teaching, and was for five years Principal of the Burr Seminary in Vermont, and then held the post of Principal of the English

Department of Phillips Academy in Andover. Next, he was Professor of German in Princeton College where he received the degree of S. T. D.; then he became Professor of Latin in Lafayette College, Easton, Pa., and occupied the position for twenty years. Mr. Coleman was a man of great erudition and wide culture, and few surpassed him in teaching. He was the author of "Antiquities of the Christian Church" (1841), "Ancient Christianity" (1852), "Historical Text-Book and Atlas of Biblical Geography" (1854), "Prelacy and Ritualism" (1869), and other works. In all these books is the print of conscientious and laborious research; their style is easy, and to the Biblical student they are of much value, and are still used as text-books. A short time before his death, he presented to the pastor of the Belchertown (Mass.) Congregational Church a valuable Hebrew concordance compiled by himself; accompanying the book was the following message to his first and only parish: "Pity me, O my people! for the hand of God hath touched me." He had been stricken with paralysis not long before.

CROSMAN, GEORGE H., born in Taunton, Mass., in 1798; died in Philadelphia, May 28, 1882. In September, 1819, he entered West Point, and graduated in 1823. He served as brevet second-lieutenant of the Third Infantry, and was afterward promoted to the position of full second-lieutenant, Second Infantry. In 1828 he was promoted to the position of first-lieutenant of the Sixth Infantry, and in October, 1830, was made quartermaster. During the period of the "Black Hawk" War he was engaged in the hazardous and hard duty of quartermaster in the Indian country, and in 1837 was promoted to the position of captain in the same regiment. He was also again made quartermaster, and placed on staff duty. During the Mexican War he was in active service in Texas, and at the storming of Palo Alto took

a conspicuous part. For service of meritorious character in this fight he was brevetted major. In 1856 he was put in charge of the quartermaster's department in Philadelphia, and in that year was brevetted a lieutenant-colonel. In 1860 he was sent to Utah, but returned to Philadelphia in 1861. In 1863 he was promoted to colonel, and made depot quartermaster, and in 1865 was given the highly complimentary position of brevet brigadier and major-general United States Army, for "faithful and meritorious service during the civil war." General Crosman was retired from the army in 1866, being over sixty-two years of age, but was on duty again in Philadelphia as Chief Quartermaster of the Department of the East. For some years past he had been living in retirement.

DEFREES, JOHN D., born at Sparta, White County, Tenn., November 8, 1811; died at Berkeley Springs, West Va., October 19, 1882. In 1818 Mr. Defrees was apprenticed by his father to a printer in Ohio, in connection with which pursuit he studied law. His first vote was given to Henry Clay for President. In 1836 he was admitted to the bar by the Supreme Court of Indiana, having removed to that State a few years previous, and in conjunction with his brother established a weekly newspaper. Mr. Defrees soon evinced political shrewdness, and was sent to the Legislature, where he distinguished himself sufficiently to be several times returned. In 1844 he resigned his seat in the State Senate, and bought "The Indiana State Journal," a weekly paper, published at Indianapolis. He located at the capital of the State, and made his paper a daily, which he edited for a number of years. After the Whig party declined, and the Republican party was organized, he associated his interest with the new party, and in 1856 became the first Republican State Chairman, which position he occupied until 1860. Mr. Defrees was intimate with many of the leading politicians of that period, among whom were Clay, Crittenden, Webster, and Corwin. He was regarded as a very adroit politician, and was valuable to his party. President Lincoln appointed him to the office of Government Printer, which he filled for many years.

DENNISON, WILLIAM, born in Cincinnati, O., November 9, 1815; died at Columbus, O., June 15, 1882. His father, a well-known and prosperous business-man, took great pride in his son William, and gave him a classical education. In preparation for college he had the benefit of the best schools in Cincinnati, and in 1831 he entered as freshman the Miami University at Oxford, O. In September, near the close of his twentieth year, he graduated with high honor, returned to Cincinnati, and commenced the study of law in the office of Nathaniel G. Pendleton and Stephen Fales. After completing his legal studies and being admitted to the bar, he began the practice of his profession in his native city. In politics

Mr. Dennison was an original Whig; throughout the existence of that party organization he was a firm, consistent, and zealously active member of it. In 1847 he was elected to a term of two years in the Ohio Senate; he next served as President of the Columbus and Xenia Railroad, until 1859, when he was chosen by the Republican party Governor of the State. He was inaugurated January 9, 1860, and delivered his first message to the Fifty-fourth General Assembly, January 7, 1861. In April of the same year, at his suggestion, the Legislature of Ohio voted \$3,000,000 to "protect the State from invasion and insurrection," and conferred additional power on the Executive to raise troops, etc. In response to the President's call for 11,000 troops, Governor Dennison offered 30,000 men, and sent agents to Washington to urge their acceptance, and the adoption of a vigorous policy in conducting the war. He took possession of the telegraph lines and railroads in the name of the State, and exercised much authority not conferred by law. He seized money *in transitu* from Washington to the State Auditor, and turned it over to the Quartermaster-General of the State, to clothe and equip the soldiers. Governor Dennison was a delegate to the Republican National Convention in 1864, and was elected chairman of that body. A great admirer of Mr. Lincoln, and an ardent anti-slavery advocate, he was made Postmaster-General on the retirement of Montgomery Blair from the Cabinet, and he retained the post until President Johnson declared his "policy"; then he resigned at once, and retired into private life at Columbus. He was a candidate for Senator when General Garfield was chosen in 1880.

DINSMORE, SAMUEL P., born in Bristol, Me.; died in New York city, March 22, 1882. Mr. Dinsmore graduated at Bowdoin College in 1844. After that he studied law in Bangor, and was admitted to the bar in that city. Shortly afterward he became editor of the Bangor "Mercury," and while holding that position had considerable influence in local politics. He took an active part in the campaign for Fremont, a candidate for President. Early in life he was a contributor to current literature, as well as during the period of his editorial labors, having written for "The North American Review," "The Republican Court" of Washington, and other publications. He came to New York to practice law in 1857, then was appointed to a position in the War Department by President Lincoln; subsequently he held for a short time the post of financial editor of the "Evening Post." Mr. Dinsmore was a journalist over thirty-five years.

GARDINER, SAMUEL BUELL, died January 5, 1882, at East Hampton, Long Island, in the sixty-seventh year of his age. He was a great-grandson of the Rev. Samuel Buell, the first clergyman settled on Long Island, and was a lineal descendant of Lion Gardiner, the founder of the famous family, which, for two hundred



and forty-two years, have held rightful and undisputed possession of the first white-man's settlement formed within the present limits of the State of New York. Gardiner's Island is, probably, the oldest entailed estate in the country; it was purchased from the Indians by Lion Gardiner in 1639. It was then known as Manchonock Island, and the Indians willingly sold it for a few coats, hats, hatchets, and small trinkets. Gardiner changed its name to the Isle of Wight; but, in course of time, it came to be designated only by the owner's name. The island is situated about one hundred and twenty miles from New York and fourteen from New London; it lies in Gardiner's Bay, which sets in from the ocean at the extreme end of Long Island, with Orient Point on the north and Montauk land on the south. The surroundings are very beautiful. The island is nine miles long, a mile and a half wide, and contains thirty-three hundred acres, a goodly proportion of which is under cultivation. Immense quantities of grain, hay, live-stock, fruit, dairy-produce, timber, etc., are raised thereon yearly. The subject of this sketch succeeded his brother, John Griswold Gardiner, in the ownership of the island in 1861. He was a fine-looking, but quiet and unostentatious gentleman.

GILLETTE, Rev. Dr. A. D., born September 8, 1807; died August 24, 1882. After passing through a successful course of studies at Madison University and Union College, he was ordained a Baptist minister in 1831, and passed the greater part of his life in active service. In May, 1862, he was installed pastor over the Schenectady Baptist Church, where he remained for five years, was then called to Philadelphia, and afterward to New York, where he became pastor of the Broadway Baptist Church, a position which he held twelve years; then he went to Washington, D. C. In January, 1872, he was elected Corresponding Secretary of the American and Foreign Bible Society.

GEMMILL, WILLIAM D., died in San Francisco, 1882, aged forty years. Mr. Gemmill was the son of a Philadelphia dry-goods merchant. At his father's death he inherited an ample fortune, and, having a predilection for the stage, he abandoned his business in 1875, and, in conjunction with three other young gentlemen of means, he opened the Chestnut-Street Theatre, Philadelphia, with Byron's comedy, "Our Boys." After a short season, he inaugurated a series of Shakespearean revivals, in which money was spent with a lavish hand. The venture was not successful, and, for financial reasons, the management of the theatre was given up, and Mr. Gemmill went on the stage. He appeared in leading characters, and his impersonation of *Hamlet* was much praised. About two years ago he retired from the Chestnut-Street Theatre, and since then belonged to different stock companies, and appeared frequently in the West.

GODDARD, DELANO A., editor of the Bos-

ton "Daily Advertiser," died on January 4th of congestion of the lungs. Mr. Goddard was born in Worcester, Mass., August 27, 1831, and was a graduate of Yale College. After having spent some years upon the Worcester "Spy," he became, in 1869, associate editor of the "Daily Advertiser," and shortly afterward editor-in-chief. He was a member of the Massachusetts Historical Society, and was much interested in questions relating to the history and influence of his profession. Two years ago he read a paper before the New England Historico-Genealogical Society upon "Newspapers and Newspaper Writers of New England," which formed the basis of an article contributed to the second volume of the "Memorial History of Boston," entitled "The Press and Literature of the Provincial Period." An article on "The Pulpit, Press, and Literature of the Revolutionary Period," was also contributed by him to the third volume of the same work. Mr. Goddard represented his native place in the State Legislature in 1862, and also in 1868, but beyond these he held no public positions.

GUBERT, LOUISE, born in Philadelphia, Pa.; died in Baltimore, Md., 1882. Her paternal grandfather was a French officer, and served under the first Napoleon. Her father was born in Cuba, and married a sister of the late Milnor Roberts, a civil engineer of distinction. At the age of eighteen months, Louise developed the most wonderful musical talent, and, to the surprise of her family, sang with perfect correctness a little ballad that she had frequently heard others sing, called "By the Margin of Fair Zurich's Waters." As she grew older the wonderful gift attracted the attention of some of the most distinguished musicians of the time. At the age of fifteen she was selected by Mr. Cross, an experienced musician, to sing the "Inflammatus" from Rossini's "Stabat Mater," at a concert given by the Musical Fund Hall Society, in Philadelphia, in preference to a number of amateurs who were also to take part. Her voice was the most exquisite soprano, and the night of the concert she sang the celebrated selection with such power and sweetness, that Perelli, the eminent Italian vocalist, who was conducting the orchestra, was so much enraptured with the loveliness of her voice that he entreated her father to grant him the privilege of training it. The request was complied with, and the knowledge of music that she had already acquired under the instruction of Mr. Wolseiffer, a German professor of renown in her native city, enabled her very soon to become celebrated, and she was always the prominent voice in the numerous concerts and *soirées* got up for charitable purposes. She also sang in the choir of St. Augustine's church. While she was still pursuing her education, the Sisters of the Visitation from Georgetown, D. C., established a branch of their order in Philadelphia. Miss Gubert became one of their

pupils, and, under the pious teaching of the Daughters of St. Francis of Sales, she formed the determination of embracing a religious life. In the mean time she was constantly solicited to appear in public. Madame Laboide asked permission to take her to Paris and place her in charge of Meyerbeer, who, she said, would write operas for her voice. Madame Sontag, after hearing her sing, passed the highest encomiums upon her voice, and advised her to abandon the instruction of teachers, and follow the guidance of her own genius. After this a great difference was observed in her style; she turned her attention to the German school, and acquired great dramatic power and pathos. She possessed the rare quality of imparting her knowledge to others, which made her eminently successful as a teacher. A few years after her father's death she accompanied the Right Rev. Bishop Whelan to his episcopal city of Wheeling, Va., and in a short time she entered the Community of Visitation Nuns established there, where the spiritual name of Sister Mary Agnes was conferred upon her. Through her skill and energy their school acquired a reputation unsurpassed in the United States. Before the academy was removed to its present locality, at Mt. de Chantal, she was visited by all the distinguished musicians who passed through Wheeling. Adeline and Carlotta Patti, Carl Formes the great basso, Thalberg the pianist, and other celebrities, had the privilege of hearing her sing, in obedience to the commands of her superiors. Carl Formes was at once impressed with her rare dramatic power, and advised her to study the grand aria from "Oberon," "Ocean, thou mighty monster!" which afterward became one of her favorite and most celebrated pieces. Among her most prominent songs were "The Erl King," by Schubert, and the principal arias from "Der Freischütz." The last time that she sang in the convent was on the occasion of a first communion, when, without organ accompaniment, she rendered, with the pathetic feeling for which she was so noted, one of Father Faber's hymns.

HEALY, JOHN PLUMMER, born December 28, 1810, in Washington, Sullivan County, N. H.; died January 4, 1882, in Boston, Mass. His father, Joseph Healy, was a Representative from New Hampshire in Congress from 1825 to 1829, and a warm friend and admirer of Daniel Webster; these facts had an important bearing on the career of his son. The senior Healy was a man of noble character, although of limited means. He sent his son to Dartmouth College, through which he passed, as poor boys do, eking out his pecuniary resources by teaching. Mr. Healy was graduated from Dartmouth in 1835, from which he received the degree of LL. D. in 1871. He came at once to Boston, and entered the law-office of Daniel Webster. By his diligence, quick apprehension, and courteous conduct he won the warm friendship of Mr. Webster; and, when he had

completed his legal studies, became the famous statesman's law partner, a relation that he maintained until it was terminated by Mr. Webster's death. When Mr. Webster was Secretary of State, he offered Mr. Healy the chief-justiceship of California, which was declined. He was several times offered the chief-justiceship of the Supreme Court of Massachusetts, but always declined, being content with his position of a trusted legal adviser, and the Solicitor of the City of Boston, which office he assumed in 1856, and continued to hold until March 30, 1881. While he was a general practitioner of law, he was connected for several years with the Massachusetts Legislature. He entered the House in 1840, and was made Senator in 1854, serving his terms with ability. After he became City Solicitor, he devoted by far the greater part of his time to the duties of that office, which he discharged most efficiently.

HATZLER, ELISABETH, born at Landau, France, in 1790, died in Philadelphia, January 1, 1882. She was a veteran of the Franco-Russian War of 1812. At the age of twenty she married George Hatzler, a sergeant of cavalry in the French army. Very soon after their marriage her husband was ordered to join the memorable expedition against Russia, and Madame Hatzler determined to go with him. Her hair was cut short, a soldier's uniform took the place of the feminine attire, and thus disguised she rode at her husband's side during the whole campaign. She was present at all of the principal battles, and at the burning of Moscow. After the promotion of her husband to the rank of a staff-officer, she had many opportunities of seeing the great Emperor, and on several occasions conversed with him. An accident to her husband separated them from the main army at one time, and for nine weeks Madame Hatzler dragged him on a hand-sledge over the frozen ground. Through a guide's treachery they were taken prisoners by the Cossacks, and held for months. They were exchanged in time to rejoin the French army and undergo the sufferings and privations of the disastrous retreat which almost annihilated Napoleon's forces. Through all these vicissitudes the sex of the woman remained undiscovered. Mrs. Hatzler emigrated to this country in 1846, and lived for twelve years on Fort Delaware, while it was being built by Major Sanders. Up to the time of her death she retained the full use of all her faculties, and it is said that since leaving the battle-field in 1814 she never suffered any results of her long exposure. She spoke English, German, and French fluently, and had also skill in the Russian and Italian languages.

How, Mrs. MARY KIRKPATRICK, widow of Rev. Dr. S. B. How, died in New Brunswick, N. J., aged eighty-nine years. She was the eldest and last surviving child of Chief-Justice Kirkpatrick, of New Jersey, whose wife was Jane Bayard, a descendant of Madame Anne



Bayard, sister of Peter Stuyvesant. She, with her four children, accompanied the last of the Dutch Governors to New York in May, 1647. Mrs. How's grandfather was a Revolutionary patriot, and a personal friend of Washington, Franklin, Hamilton, Lafayette, and Kosciusko, of whom Bancroft says, "Colonel John Bayard was personally brave, pensive, earnest, and devout." Mrs. How's health had been gradually failing for a few months, but her mind remained clear and unclouded till within a week of her death. Early in March, in conversation with her nephew, General James Grant Wilson, she mentioned having been present with her grandfather at the funeral services held in honor of Washington at New Brunswick, in December, 1799, and of her having seen and spoken with Hamilton on her first visit to Mrs. Bayard, of New York, in 1803. She spent a portion of the winter of 1811-'12 in Washington, where she became intimate with President Madison and his family circle, meeting most of the prominent people of that period. On one of her last visits to New York she saw a lady after a separation of seventy years. They were girls together at a fashionable school, and parted to meet again as venerable women of more than fourscore. Mrs. How was a philanthropic Christian lady.

KELLOGG, ENSIGN H., died at Pittsfield, Mass., 1882, aged seventy years. He graduated at Amherst in 1836, and made the law his profession. He was prominent in local political affairs, and had been a member of the State House of Representatives, of which he was Speaker for two terms. He served also as Senator, and was the American representative on the late Fisheries Commission.

KIMBALL, EUGENE, born in Rochester, N. Y.; died in the same place, August 2, 1882, aged thirty-one years. He was formerly a famous base-ball player, and belonged to the Cleveland nine in 1871 and 1872, as center-field and short stop. For eighteen years past he had been a professional billiard-player, and won distinction at cushion-carroms, which was his best game. He has played in private all over the country, and was widely known and esteemed as an upright, honest man, with many amiable qualities. His first public appearance as a billiardist was in a tournament in Rochester; his last games were played in New York, in April and June, 1882. In the first-named month he played with Sexton, who gave him 150 points out of 500; he defeated Sexton by 99 points. In June he played a match with Daly on even terms, and was defeated. Slosson, the champion, who knew Kimball well, pronounced him a first-class player, of great promise, showing signs of rapid improvement.

LELAND, GEORGE S., born in Langrove, Vt., 1838; died in New York city, August 2, 1882. Mr. Leland received the regular Eastern common-school education, and at an early age became interested in the management of hotels. Before he was twenty-one he

came to New York, and opened the well-remembered Clinton Hotel, where the Nassau Bank and Kelly Building are now. In 1852 he went to the Metropolitan Hotel, and his talent and ability were soon noticed in the energetic management of that popular and profitable hotel. In 1861 he joined the army, and served in the war for the Union. He was well equipped mentally and physically for the exacting duties of the commissariat department, and sought usefulness there. His ability was soon recognized, and in a short time he was appointed chief commissary for the division, then quartered near Harper's Ferry. There he served faithfully and zealously. His business integrity was beyond question, and his usefulness conspicuous. He was personally known to President Lincoln, who sent him a major's commission and a complimentary letter. In 1864 his interest called him to New York, and he arranged to participate in the management of the Grand Union Hotel in Saratoga. Mr. George S. Leland and his brothers then had a chain of hotels extending from Saratoga to Albany, and from New York to San Francisco, where the great Palace Hotel was established. For a while Major Leland conducted the St. Charles Hotel, New York, and eleven years ago, with his brother Lewis, he opened the Sturtevant House in the same city.

LINCOLN, MARY TODD, born in Kentucky; died in Springfield, Ill., July 16, 1882. Her father, Robert S. Todd, was a prominent Kentucky politician. Mrs. Lincoln's marriage with Abraham Lincoln was very much opposed by her family. The parties each possessed strongly-marked peculiarities of disposition and temperament, and serious misgivings as to their happiness were entertained. Their married life was nevertheless marked by great affection and contentment. At the time of the marriage, Mr. Lincoln was thirty-two years of age, and "merely a prairie-lawyer," as he was fond of describing himself in after-years. He was naturally of a slow imagination, and needed encouragement in the political field. It is believed that to the energy and ambition of his wife he owed much of his advancement, while it is admitted that he could always rise to the crest of the circumstances with which even his high and critical position as Chief Magistrate of a nation at war was surrounded. There were those who unjustly looked with suspicion upon Mrs. Lincoln, at the time of her entry into the White House, because of the tendencies of her family and her native State, but her life as the wife of the President proved conclusively that she was loyal to him and to the country of which he was the chosen head. She was neither a woman of great refinement nor of a high degree of intellectuality, yet she possessed a strong faith in her husband as a man of great promise, and recognized in him qualities which were unseen and unsuspected by his fellow-men for years after her openly-expressed prophecies of his future. Mrs. Lincoln, like others

of a naturally singular character and eccentric habits, suffered much unmerited contumely both before and since her husband's death. That catastrophe without doubt unsettled her reason, for, with all her weaknesses, she was attached to Mr. Lincoln by an affection that was even greater than the ambition with which it went hand-in-hand to seek his advancement. For many years she suffered from a combination of real and imaginary ills, and that her bodily ailments were not all chimerical is proved by the closeness with which death followed the paralytic shock received a few days before. Those who for years have persisted in maligning Mrs. Lincoln should cast a glance at the sorrowful side of her life: her second son died in childhood; her third son, William, a boy of unusual precocity, died during her first year in the White House; Thomas Todd Lincoln, her fourth son, who was the life and plaything of the Executive mansion, died eight years ago, just as he was approaching man's estate, and after he had become the staff and solace of his stricken mother. Add to these afflictions the great one of having a loving and beloved husband killed by her side, during a short season of pleasure, after his re-entry upon a new and prosperous term of high office. Her death leaves but one representative of the family, which numbered five at the time of the entrance of its head upon the duties of the presidency—the eldest son, Robert Todd Lincoln, the present Secretary of War.

MAYNARD, HORACE, born at Westboro, Mass., August 13, 1814; died at Knoxville, Tenn., May 3, 1882. He received an academic education at Millbury, Mass., and entered Amherst College in 1834, and graduated from it in 1838. The following year he removed to Knoxville, and was appointed Principal of Hampden Sidney Academy. The next year he was elected instructor in East Tennessee College, which became a university in 1842, and served in that capacity for four years, when he was appointed Professor of Mathematics and Natural Philosophy. He remained in that chair but one year; at the end thereof he entered upon the study of law, and after one year's preparation was admitted to the bar. Mr. Maynard followed his profession until 1857, when he was elected to Congress as the candidate of the Whig party; two years after, he was re-elected, and again in 1861. He returned to Knoxville upon its occupation by General Burnside, in the fall of 1863. The war having ended, he was elected to Congress from Tennessee repeatedly, once from the State at large, and other times from the Knoxville district, until 1875. Mr. Maynard was United States Minister to Turkey, by appointment of President Hayes, for nearly four years, and Postmaster-General for a few months before General Garfield's inauguration. He was a man of distinguished abilities, was a forcible and clear speaker, and always entertaining. Having espoused with Andrew Johnson the principles of

the Republican party, he remained faithful to them. Just previous to his death he had attended the State Republican Convention at Nashville.

MCCLAY, WILLIAM B., died in New York city, in 1882, aged seventy years. He began his political career in 1840, and continued to be a public man up to 1861, when he retired to private life. He was elected to the Assembly in 1840, 1841, and 1842, and was a member of the Twenty-eighth, Twenty-ninth, Thirtieth, Thirty-fifth, and Thirty-sixth Congresses.

MCCANDLESS, WILSON, born in Pittsburgh, Pa., June 19, 1810; died in the same town, June 30, 1882. His parents, although Scotch-Irish, were born in the United States. Judge McCandless was a graduate of the Western University. He studied law with W. W. Fetterman, and was admitted to practice June 19, 1831. Being a close student, he soon made a reputation at the bar, and his powers of oratory won him a large connection. After a successful practice for more than twenty-five years, he was appointed by President Buchanan, on the 8th of February, 1859, United States District Judge for the Western District of Pennsylvania, embracing a large jurisdiction. Long before his judicial career commenced, Judge McCandless took an active part in politics; he was a Democrat of the most aggressive type, and most persistent in maintaining the principles he espoused. His manner was polite and agreeable, and, no matter how excited the discussion of political points might grow, he was able to command the respect and esteem of his most violent opponents. He was three times elector for President and Vice-President of the United States, in 1844, 1852, and 1856, and was twice president of the electoral college of the State. In 1848 he was chairman of the Pennsylvania delegation in the National Democratic Convention held in Baltimore. He was a member of the Masonic fraternity, and was Past-Master of Milner Lodge. On the occasion of the visit of John Quincy Adams to Pittsburgh, in 1833, he delivered the address of welcome; also, the oration on the death of General Jackson, in 1848.

MORRISON, JOHN IRWIN, died in Knightstown, Ind., July 17, 1882, aged seventy-seven years. He was a Pennsylvanian by birth, but was taken to Indiana when a child. His opportunities for an education were meager, but his indefatigable energy and perseverance enabled him to overcome all difficulties, and he finally "worked his way" through Miami University, O. He entered the teacher's profession, and soon became principal of what was for many years known as the "Washington County Seminary," at Salem, Ind. He made this one of the best-known schools in the State, and its patronage was not limited to Indiana. His force of character enabled him to impress himself upon his students in an extraordinary manner. Among his former students were many who have risen to eminence. He was



for three years Professor of Greek in the State University, and for many years one of its trustees. Mr. Morrison filled many offices of trust and honor. He was twice elected Treasurer of his own county, and was a member of each House of the State Legislature. In 1852 he was a member of the convention that framed the present Constitution of the State, and as a member of the Committee on Education aided in shaping Indiana's excellent school system. In 1864 President Lincoln appointed him Commissioner of Enrollment, and he was one of Governor Morton's trusted advisers in those perilous times. While holding this position he was elected Treasurer of the State. His public career was as honorable as his private life was stainless. He was a man of rare intellectual attainments and force of character.

NAIRNE, CHARLES MURRAY, born at Perth, Scotland, April 15, 1808; died at Warrenton, Va., May 29, 1882. He graduated M. A. at St. Andrews University, in 1830, and two years later at Edinburgh. For some time he was assistant to the celebrated Dr. Thomas Chalmers, at Glasgow, and in 1847 came to this country. For a short while he taught in the principal classical school in Poughkeepsie; leaving there, he came to New York, and established a private school, and in 1857 accepted the professorship of Philosophy and Belles-Lettres in Columbia College. He continued to hold his position until October, 1881, when, his health having become greatly impaired, he was relieved from duty. Professor Nairne was a finished writer and a very attractive speaker; occasionally he lectured upon the subjects he had made a life-study, and was regarded as one of the most accomplished scholars in those departments. He published a collection of "Lectures and Orations," as well as many pamphlets of lesser note. Professor Nairne was a man of great gentleness of character, and in his lecture-room was particularly kind and courteous in his manner toward the students.

PAINE, ROBERT, born in Person County, N. C., November, 1799; died in Aberdeen, Miss., October 20, 1882. When quite a boy his parents removed to Tennessee, where he received a good education. He joined the Methodist Conference of that State, and became a missionary preacher. In 1830 he was elected President of La Grange College, Alabama, the duties of which position he discharged with ability for sixteen years. He was made bishop in 1846, during a very important period of the Methodist Church, when the Northern and Southern portions disagreed, and separate organizations were formed. Bishop Paine presided over the first General Conference of the new body that was held in Petersburg, Va., in 1846. He was made chairman of a committee to draw up a declaration of the intentions of the delegates from Southern States, in seceding from the General Conference. The question of dividing the Church property came before

the Supreme Court of the United States, and during the time Bishop Paine worked zealously and ably for the good of the Church. Since the war the Church has wonderfully recovered from her misfortunes, owing in a great measure to his courage and untiring ability. He was also instrumental in establishing new missions in the Southern States, and even in Mexico and China. Bishop Paine was the author of a valuable work, which was published at the request of the General Conference, the "Life and Times of Bishop McKendree."

PEASE, ALFRED H., born in Cleveland, O.; died in St. Louis, Mo., July 13, 1882. His descent was direct on his mother's side from Colonel David Humphreys, an aide to General Washington in the Revolutionary War; afterward secretary to Benjamin Franklin, and Minister to Spain. At an early age Mr. Pease evinced a remarkable talent for music, but his parents, being averse to his becoming a professional musician, strove to counteract the tendency. At the age of sixteen he entered Kenyon College, at Gambier, Ohio, and at once displayed a wonderful taste for drawing and painting. In the prosecution of his studies he made the acquaintance of a young German, with whom he visited Germany under a plea of ill-health; there his love of music mastered him, and he studied under Theodor Kinlack, court pianist of Prussia, who taught him the different schools of piano-music. Richard Wuerst instructed him in composition, after the manner of Felix Mendelssohn. Wieprecht, the Prussian Director of Military Music, taught him the science of orchestral scoring, and his compositions were received with favor by the Berlin public. With the foundation of his future career thus laid, Mr. Pease returned to America with happy prophecy of a success which he rapidly achieved. He was not content, however, with the knowledge gained, and returned to Europe and studied for nearly three years under Von Bulow. As a composer, Mr. Pease stood at the head of the second rank, and his works are to be found in all the fields of composition, though his success was greatest in the orchestral and vocal. The list of his popular songs reaches nearly one hundred in number, and many of them have found favor with the most distinguished singers of the time—Miss Kellogg, Mmes. Nilsson, Albani, Parepa Rosa, Marie Roze, and others. As a composer he was original in melody and prolific in theme; he made many additions to church-music, but his most remarkable composition was a memorial hymn, dedicated to an only brother and sister, who lost their lives in the New Hamburg disaster, and whose terrible deaths seemed to cast a shadow upon him which, in a measure, accounted for the pursuit of the melancholy habit of drinking, which indirectly resulted in his own sad end. Mr. Pease was a resident of Buffalo, and went to St. Louis about the middle of May, 1882, from

Chicago, where he had given a series of highly successful concerts; he stopped in St. Louis with an acquaintance until June 5, 1882, when he suddenly and mysteriously disappeared, and offers of large rewards by his friends, and the employment of private detectives, availed nothing in the search for the unfortunate man. His last dissipation began several days before his disappearance. He was identified, after death, as one who had registered at an hotel under the name of John C. Doehn, and his body was not recognized until after it had been conveyed to the morgue.

PRUYN, ROBERT H., died at Albany, N. Y., 1882. Mr. Pruyn was Minister to Japan under President Lincoln; was a candidate for Governor in 1865; and was President of the National Commercial Bank of Albany, and of the Dudley Observatory, besides being trustee and director in several institutions.

PUTNAM, JOHN PHELPS, born March 21, 1817, in Hartford, Conn.; died January 4, 1882. Judge Putnam's father was also a native of Hartford, and in his day one of its most prominent citizens—a merchant, a director of several insurance and banking institutions, and an alderman and mayor of the city successively. His grandfather came to the United States from the north of England and settled in Hartford in 1789. From what is known of the genealogy of the family, it is supposed to have been connected in England with the family of John Putnam who came over in 1634, and who was one of the oldest settlers of Salem Village, now Danvers, and also the ancestor of General Israel Putnam, of Revolutionary fame. Judge Putnam was a graduate of Yale College in 1837. Immediately after, he entered the office of the late Hon. William W. Ellsworth. He received a two years' course of instruction in the Harvard Law School, where was also conferred on him the degree of LL.B. After that he entered the office of Sidney Bartlett, one of the oldest as well as one of the ablest members of the Suffolk Bar. Judge Putnam was admitted to the bar in 1840, when he immediately began an independent practice in Boston, and for many years prosecuted it with excellent success. In addition to the exacting duties of professional life from 1847 to 1858, he edited no less than fifteen volumes of the "Annual Digest" of the decisions of all the courts of the United States. Judge Putnam was for two years Judge of Probate of Suffolk County; prior to that, he held for a number of years the office of Commissioner of Insolvency for the same county. He was one of the original Judges of the Superior Court, appointed on its organization in 1859. He was passionately fond of music, was President of the Apollo Club, and long identified with musical undertakings. It was mainly through his exertions that the great organ of Music Hall was procured.

ROBBINS, CHANDLER, Rev. Dr., born February 14, 1810; died September 11, 1882. A native of Massachusetts and a graduate from

Harvard University in 1829, after passing through Cambridge Divinity School he was ordained pastor of the Second Unitarian Church in 1833, his predecessor being Ralph Waldo Emerson. He remained in charge there for forty-one years, and at the time of his resignation he was the oldest settled pastor in Boston. In 1855 Harvard University bestowed upon him the degree of D.D. Dr. Robbins was a frequent contributor to literary and religious periodicals; he was also the author of "A History of the Second Church" (1852), of "Memoirs of Maria E. Clapp" (1858), of "Memoirs of William Appleton" (1868). He was a member of the Massachusetts Historical Society, and editor of its "Proceedings."

ROBERTS, SOLOMON W., born in Philadelphia, Pa., August 3, 1811; died in Atlantic City, N. J., May 22, 1882. His ancestors were among the families of Welsh members of the Society of Friends who came over with William Penn. At the age of sixteen he went to Mauch Chunk as the assistant of his uncle Josiah White, the acting manager and superintendent of the Lehigh Coal and Navigation Company, and under his direction constructed the Summit-Hill Railroad, the first one completed in Pennsylvania. He remained with the Lehigh Company until 1829, when he entered the service of the State as one of the engineers of the canal to be constructed on the Conemaugh River. In 1831 he received the appointment of principal assistant engineer in the construction of the Alleghany Portage Railroad, and afterward held the position of resident engineer and superintendent of transportation. In 1836 he resigned in order to visit Europe in behalf of the Philadelphia and Reading Railroad. He remained abroad for two years, superintending the manufacture of rails for the Reading Company, in South Wales. While there he visited the works of George Crane, who had then just succeeded in his invention for smelting iron-ore in large quantities by the use of anthracite coal and the hot blast. Upon his return home, Mr. Roberts called the attention of the Franklin Institute to the new invention, and interested his uncle, Josiah White, to the extent of founding, with others of his associates, the Crane Iron-Works on the Lehigh, which were the successful beginning of Pennsylvania's immense iron-trade. From 1838 to 1841 he was the chief engineer of the Catawissa Railway. On its completion he accepted the place of president and acting superintendent of the Philadelphia, Germantown, and Norristown Railway. He was also President of the Schuylkill Navigation Company from 1843 to 1845, and devised the plan by which navigation on that river was made feasible for boats of large tonnage. When the Pennsylvania Railroad was chartered, in 1847, Mr. Roberts declined an official position, but was elected for the purpose of representing its interest to the membership of the Lower House of the Legislature, where his experience in



railroad matters enabled him to obtain important legislation on the subject, and also to secure the passage of an act incorporating a company to construct the "Ohio and Pennsylvania Railroad" from Pittsburg to the State line. He became chief-engineer of this road and its extension in 1848, and in April, 1853, saw it completed to Crestline—for which town, and for that of Alliance, he selected both site and name. He remained with the company until 1856 as general superintendent, when he resigned and moved to Philadelphia, from Pittsburg, to accept the post of chief-engineer and general superintendent of the North Pennsylvania Railroad, which then extended only to Gwynedd. In July of 1857 he had it completed to Bethlehem, and thereafter devoted himself to the care of its constantly increasing business, refusing at various times the proffered presidency of other railway schemes. In July, 1875, he was one of the board nominated by the Franklin Institute, at the request of Mayor Stokely, to consider "the entire subject of the present and future water-supply of Philadelphia."

RUDERSDORFF, EMMA MANSFIELD, born at Ivanowsky, in the Ukraine government in Russia, in 1822; died in Boston, Mass., 1882. Her father was a distinguished violinist. Madame Rudersdorff was a soprano singer of great success, making her first appearance professionally in Leipsic, in 1840, and subsequently filling engagements in opera in all the prominent cities of the Old World.

RYERSON, ADOLPHUS EGERTON, born at Charlottetown, in the present Province of Ontario, Canada, March 24, 1803; died at Toronto, Ont., 1882. Rev. Mr. Ryerson, D. D., LL. D., was the son of a loyalist of the American Revolution, who settled in New Brunswick, and afterward in Upper Canada. He received a good classical education, became a Wesleyan minister in 1825, and founded in 1829 the "Guardian" newspaper, the organ of the Canadian Wesleyans. He was a delegate to the British Wesleyan Conference in 1833 and 1886; was appointed in 1841 Principal of Victoria College, Coburg, Ont., and in 1844 Superintendent of Public Schools for Upper Canada. In that capacity he made an extensive tour of observation in the United States and Europe, and published an elaborate report on methods of education in 1847, with a plan for the reorganization of the Canadian schools, which he labored for many years to improve. Mr. Ryerson wrote largely on educational topics, and maintained warm controversies with the opponents of the system he advocated. He was author of a "History of Canada" and of a "History of the United Empire Loyalists."

SAWYER, GEORGE Y., died June 15, 1882, in Boston, Mass. He was a classmate in Bowdoin College of William Pitt Fessenden, of Maine; Henry W. Longfellow, Nathaniel Hawthorne, Franklin Pierce, and other distinguished gentlemen. In 1839-1841 he represented Nashua,

N. H., in the Legislature, and, in one of the exciting political campaigns of that decade, he was the Whig candidate for Congress, falling a few votes short of the election. He was Judge of the Court of Common Pleas from 1851 to 1854, and of the Supreme Judicial Court from 1855 to 1859. Judge Sawyer declined an offer by President Pierce of the governorship of one of the Territories, and devoted himself, to within a few years, to an extensive law practice, being, in 1865, one of the commissioners that revised and codified the statute laws of the State.

SCHEM, ALEXANDER JACOB, a German-American scholar, born in Wiedenbrück, Westphalia, March 16, 1826; died at West Hoboken, N. J., May 21, 1881. He studied theology and philology in the Universities of Bonn and Tübingen, and came to the United States in 1851. In 1854 he was appointed Professor of Ancient and Modern Languages in Dickinson College, Carlisle, Pa., but left this position in 1860 to devote himself entirely to literature. While in Carlisle, he edited, together with Rev. George R. Crooks, a Latin-English Dictionary (Philadelphia, 1857). In 1860 he went to New York, where he received an appointment on the staff of the "New York Tribune." He was particularly noted for his encyclopedic and statistical labors, which he began in 1859 as a regular contributor to the "American Cyclopædia," for which he furnished a large number of articles. He was also a regular contributor to the "Annual Cyclopædia" since the publication of the first volume in 1861, in the foreign and religious departments. He also wrote a large number of articles for McClintock and Strong's "Cyclopædia of Theological, Biblical, and Ecclesiastical Literature." He published the "American Ecclesiastical Year-Book (1860), and in 1868 and 1869 an "Ecclesiastical Almanac," besides contributing to numerous other almanacs and year-books. In 1869 he severed his connection with the "Tribune," and assumed the editorial charge of the "Deutsch Amerikanisches Conversations-Lexicon," which was completed in 1874. He also published several editions of "Schem's Statistics of the World," a comparative statistical table similar to Hübnér's Tables. In 1874 he was elected an assistant superintendent of public schools in New York city, which position he retained up to the time of his death. In this, as well as in his previous positions, he did much to promote among Americans a better understanding of German literature and science, and as assistant superintendent particularly, to promote the study of the German language in the public schools. Together with Henry Kiddle, he edited a "Cyclopædia of Education" (New York, 1877), which was followed by two annual supplements under the title of "Year-Book of Education" (New York, 1878 and 1879).

SMITH, IDA GREELEY, born in New York city, 1850; died at Chappaqua, N. Y., 1882.

Mrs. Smith was the eldest daughter of the late Horace Greeley. She was educated at the Academy of the Sacred Heart, at Manhattanville, and at the age of eighteen graduated with high honors. During the campaign of 1872 she presided over her father's establishment with superior grace and dignity, entertaining many of his most intimate friends. When Mr. Greeley's will was contested in December, 1872, his daughter attended each sitting of the court, exciting much admiration by her refined manner and modest bearing. In May, 1875, she was married to Colonel Nicholas Smith. It was to her that the late Cornelius J. Vanderbilt paid the \$50,000 borrowed of Mr. Greeley during the lifetime of Commodore Vanderbilt.

SPOTTS, JAMES H., born at Fort Johnson, N. C., March 11, 1822; died, 1882, at Stanley, Falkland Islands. Rear-Admiral Spotts entered the naval service August 3, 1837, was promoted from midshipman to passed-midshipman in 1843, lieutenant in 1851, commander in 1862, and captain in 1866. His total sea-service was more than twenty-two years, and until the breaking out of the war the greater part of it was spent in the South Pacific squadron. He commanded the steamer Powhatan in both engagements with Fort Fisher, November, 1864, and January, 1865; in the engagement with Fort Anderson; and engagements along the banks of the Cape Fear River in the following month; also, at the bombardment of the batteries above Dutch Gap, James River, in April of the same year. The late admiral's father was Major Spotts, the gallant officer who commanded the Fourth Artillery in the battle of New Orleans in the War of 1812.

WEBSTER, CAROLINE LE ROY, died in New York city, February 28, 1882, aged eighty-five years. Mrs. Webster's father, Jacob Le Roy, was a wealthy New-Yorker, well known in the city when its limits were less extended. She was in her youth a beautiful girl, intelligent and very attractive. In 1829 she was married to the distinguished Daniel Webster. Their nuptials were celebrated at a time of great excitement, and full of special interest to Mr. Webster. Mrs. Webster was then in the prime of life, well informed and acquainted with national affairs, and was the confidante, companion, and honored counsel of her husband's most guarded thoughts. In his Washington life, the wife of Daniel Webster participated to a marked degree, and, until the time of his death, she was the queen of society. Elegant in appearance, and blessed with a brilliant mind, Mrs. Webster numbered among her visitors all the contemporaneous statesmen and diplomats of her husband's time. Her receptions were the most elegantly appointed events of the national capital. Among the distinguished guests who were always welcomed at her residence were Clay, Calhoun, Bulwer, Lord Ashburton, and Benton. During her travels in Europe, a few years after her mar-

riage, she was received by nearly all the crowned heads, at one time being the specially invited guest of Queen Victoria. After the death of Daniel Webster, October 24, 1852, Mrs. Webster left Marshfield, Mass., where her husband breathed his last, and came to New York and resided. The loss of her husband was a severe blow to Mrs. Webster. She was a devoted wife, and had a deep appreciation of his superior intellectual qualifications. With the competence which she had in her own right, and the income from the annuity given her by the city of Boston, she was enabled to live in the modest and comfortable style that became the widow of an American statesman. She led a most secluded life, seldom appearing in public, but took great interest in everything pertaining to the memory of Mr. Webster. About twenty-five years before her death she was thrown from a carriage and received a serious injury, which at times seemed to obscure her memory of events, yet she would often relate lengthy incidents of her husband's life. Her last appearance in public was at the unveiling of the Webster statue in 1872, when she occupied a place of honor on the platform.

OBITUARIES, FOREIGN. AINSWORTH, WILLIAM HARRISON, English novelist, died in London, January 3d, at the age of seventy-seven. His first book, "Sir John Cheverton," written in his youth while engaged to a lawyer, received the praise of Walter Scott, which incited him to adopt the profession of literature. "Rookwood" (1834) and "Jack Sheppard" (1839) enjoyed unbounded popularity. The latter was illustrated by Cruikshank in his finest vein, and was dramatized in eight different versions. The deeds of famous law-breakers, which furnished the subject of these tales, did not afterward occupy Ainsworth's pen, because the robber school of romance, as it was called, was thought to have an immoral influence. Equally vivid pictures of old England, replete with antiquarian knowledge, were the later products of his industrious pen.

AUERBACH, BERTHOLD, German novelist, died at Cannes, February 8th. That genial and prolific author was born, February 28, 1812, at Nordstetten, in Wurtemberg, and studied theology, history, and philosophy, becoming involved in the Burschenschaft movement, which led to his incarceration in 1836. While in prison he wrote "The Jews and Recent Literature," and soon afterward a philosophical novel, "Spinoza" (1837). The finest products of Auerbach's genius were objective pictures of the peasant-life of his native Black Forest, full of humor and pathos, as found in the "Dorfgeschichten" and "Die Frau Professorin." His later works, "On the Heights" (1860), "Das Landhaus am Rhein," and "Waldfried" were again more speculative and philosophical. Auerbach was an intensely patriotic German, with a deep ethnic attachment to the Israelitish race from which he sprang; and the sudden wasting of his energy, in the



midst of a vigorous old age, came from brooding over the antipathy to the Jews developed in the Fatherland.

BLANC, CHARLES, French art critic, died January 17th. He was born at Castres in 1813. He learned engraving, but afterward devoted himself to art criticism. Except when drawn aside, through sympathy with his brother, Louis Blanc, into an attempt at political journalism, his life was given up to the critical contemplation of art. His "History of Painters" procured his appointment as Director of Fine Arts under the second republic. His "Grammar of the Arts of Design" is considered the foundation of the scientific method of art criticism, and his popular writings on architecture and domestic decoration are classics of art literature.

BURKE, THOMAS HENRY, Under-Secretary for Ireland, was assassinated with the Chief Secretary in Phoenix Park, Dublin, May 6th. He was the son of an Irish gentleman who resided at Bruges, and was educated in Belgium and Germany. Born May 25, 1829, he received an appointment in Dublin Castle at an early age, and passed his life in the service of the Irish Executive. He served as private secretary to three Chief Secretaries, and succeeded Sir Thomas Larcom as Under-Secretary in 1868. Although a Liberal, he was never displaced from office by the Conservatives. To the Irish Mr. Burke had early rendered himself obnoxious by his zeal in the Castle service. He was identified in the popular mind with many of the odious measures of the Government. He was haughty and reserved in demeanor, but among his own associates was a cheerful companion, and showed some very noble traits of character.

CAVENDISH, LORD FREDERICK CHARLES, Chief Secretary to the Lord-Lieutenant of Ireland, was murdered at Dublin, May 6th. He was the second son of the Duke of Devonshire, was born in 1836, was educated at Trinity College, Cambridge, and entered the public service as private secretary to Lord Granville, then Lord President of the Council, in 1859, retaining the post until 1864. In 1872 he served for a time as private secretary to Mr. Gladstone. He sat in Parliament as representative for the West Riding of Yorkshire from 1865 to the day of his death. In 1873 he became a Lord of the Treasury, and when Gladstone came into power again he was appointed Financial Secretary to the Treasury. When Forster resigned the Chief Secretaryship of Ireland on May 1, 1882, the office was given to Frederick Cavendish, after being first offered to Mr. Porter, Irish Solicitor-General. Two days after his appointment he was assassinated. He was industrious as a public officer, but seldom spoke in Parliament, except on education or some such subject in which he took a special interest. He showed considerable ability in the Treasury. His amiable disposition had made him many friends.

CISSEY, ERNEST LOUIS COURTOT DE, French

general and former Secretary of War, died at Paris June 18th. Born at Paris December 23, 1810, he was educated at the military school of St. Cyr, fought with distinction in Algeria, was made brigadier-general for gallantry at the battle of Inkerman, and commanded a division in the Franco-Prussian War. He was chosen Secretary of War by Thiers on June 5, 1871, and labored energetically in reorganizing the system of national defense. He gave up his portfolio on May 30th, after the fall of Thiers, but was recalled May 22, 1874, upon the fall of the De Broglie ministry, and was reappointed after the retirement of the ministers upon the adoption of the republican constitution of February 25, 1875. He retained his portfolio in the Dufaure Cabinet, but was replaced by General Berthault upon the accession of Jules Simon, December 13, 1876. In October, 1880, General De Cissey, who had been appointed a division commander, was cashiered in consequence of the discovery that a woman, with whom he was intimate, had obtained a knowledge of important secrets of the war office and communicated them to the German Government.

DECAISNE, JOSEPH, French botanist, died at Paris, February 8th. He was born at Brussels in 1807, and was brought to Paris with his widowed mother by his brother Henri, who had won fame as a painter. He went into the Museum of Natural History in 1824 as a simple gardener. After eight years of rude labor his aptitude and assiduity opened the way of promotion. He robbed himself almost entirely of sleep to acquire the botanical knowledge necessary in the positions he was called upon to fill. His reports on the new plants brought to the gardens gave him a place in the first rank of descriptive botanists. Original researches in vegetable anatomy and physiology extended his reputation. His studies on madder, the beet-root, *ramie*, the potato-rot, etc., were inspired by the desire of rendering useful services common among French scientists. Decaisne was appointed Professor of Culture to the Museum in 1851, and superintended the works until his death. Besides preparing the annual volumes on botany in the "Annals of the Natural Sciences," and voluminous publications on his investigations in horticulture and the botany of fruit-trees, he wrote, with the aid of Le Maout, the "Systematic Treatise on Botany," which is as well known in America as in France.

DRAKE, FRIEDRICH, German sculptor, died in Berlin, April 6th. He was born in Pymont in 1805, and commenced life as a mechanical engineer. An amateur carving, which fell into the hands of a dealer, was sold at a price which encouraged him to follow his artistic bent. He entered the studio of the famous Rauch, and was soon able to assist his master in all his works. His first work was a Madonna statue, which was followed by a dying warrior and a maid dressing vines. His statues of Goethe,

Schiller, Rauch, Schinkel, and the Humboldts, spread his fame. He executed a number of monumental works in Berlin and other cities, among them two statues of Friedrich Wilhelm IV; an equestrian statue of the present Emperor, in Cologne; the groups on the Castle Bridge, in Berlin; the gigantic Victoria, on the triumphal column, at Berlin; and many others, besides a long catalogue of minor pieces.

DUROT, AUGUST ALEXANDRE, one of the most distinguished officers of the French army, who was second to none in the energy and ability with which he resisted the German invasion of 1870-71, died at Versailles, August 16th. He commanded the First Corps, and, after the wounding of MacMahon, was provisionally in command of the entire army, until relieved by his senior, General Wimpffen. Escaping from the Germans after being taken prisoner at Sedan, he made resolute and ingenious attempts to break the lines of the army which invested Paris. In the sortie of the Second Army of Paris on the southeast of Champigny, and in the last "supreme effort," at Montretout-Buzenval, on the east, the success of Ducrot was not equal to his merit. It was not through lack of bravery or devotion that his oath to return either dead or victorious from Champigny was not fulfilled. General Ducrot was born February 27, 1817, at Nevers, passed through the academy at St. Cyr, and received a commission in 1840. In the course of eighteen years he mounted to the grade of brigadier-general. He fought with distinction in the war of 1859 on the plains of Lombardy. He served in Africa as general of division, and at the outbreak of the Prussian War was commandant in Strasburg. General Ducrot was falsely accused of breaking his parole and taking up arms after the capitulation of Sedan.

DUPRÉ, GIOVANNI, the chief of Italian sculptors, died at Florence, January 8th. He was born March 1, 1817. His father, a wood-carver, was the son of a family which came with fallen fortunes from Lorraine. Giovanni learned the same trade. He practiced modeling in the studio of a benevolent sculptor, and found patrons who enabled him to execute his first works. Dupré was a realist, but nobler in his conceptions than any other modern follower of this tendency in sculpture. Among the best of his numerous productions are a "Pietà" in Sienna, a "Statue of Giotto" in the Uffizi at Florence, the "Triumph of the Cross" in the Church of Santa Croce, etc.

GREY, Sir GEORGE, English statesman, died September 9th. His father, the first baronet, was the brother of Earl Grey, the Reform Minister. Sir George succeeded to the title in 1828. He was born at Gibraltar, May 11, 1799, took high honors at Oxford, and was called to the bar in 1826. He entered Parliament in 1832, and was made Under-Secretary for the Colonies in 1834, Judge-Advocate in 1839, and Chancellor of the Duchy of Lancaster in 1841. He advocated arbitrary measures in the Irish,

Canadian, and Jamaican difficulties, but advanced liberal views on certain Irish questions when in opposition. In the Cabinet of Lord John Russell he was Home Secretary, and introduced the harsh repressive measures adopted during the Chartist and Irish agitations of 1848. In the Palmerston Government he again received the position of Home Secretary, and in 1866 the *habeas corpus* act was again suspended in Ireland at his proposal. He held no office during Gladstone's first ministry, and after its defeat retired from public life.

KAUFMANN, CONSTANTINE, Russian general, died May 14th. He was born in 1818. He rose rapidly in the army, and attained distinction in the Crimean War. After the war he was commissioned to arrange a plan, conjointly with General Miliutin, for the reorganization of the Russian army. He occupied the post of Governor of Lithuania for ten years, and was then appointed Governor of Turkistan. In Asia he extended the dominion of Russia, annexing successively Bokhara and Khiva, then Khokand in 1875, and was preparing to establish quietly a Russian protectorate in Afghanistan, when the resistance of the English, who made war upon his ally, Shere Ali, and the change in the political situation, led the Russian Government to abandon their designs, and eventually recall the able and energetic general who had done so much to extend the power of the White Czar in Central Asia.

LANZA, Signor, Italian statesman, died at Rome, March 9th. He was born in Piedmont in 1819. In 1848 he was chosen President of the Sardinian Chamber. He had been Minister many times in Italy, usually presiding over the Finance Department, but sometimes over that of Public Instruction. In 1866 he resigned his portfolio, and was chosen President of the Chamber in 1867. In 1870 he undertook to form a ministry, and being unable, took office under Sella, as Minister of the Interior. He retired in 1873, but continued to sit in the Chamber.

LESLIE, THOMAS EDWARD CLIFFE, British political economist, died January 27th, aged fifty-five years. He was born in Ireland, the son of a clergyman of Scotch extraction, and was called to the English bar after studying at Trinity College, Dublin, and at Lincoln's-Inn, London; but, turning his attention to literature, he became a contributor to the quarterlies, and received the appointment of Professor of Jurisprudence and Political Economy in the Queen's College, Belfast, a position which he filled for twenty-five years. Cliffe Leslie was the pioneer in England of the historical or inductive method as applied to political economy. His criticisms call in question the universality and value of the current maxims of the theoretical economists. Among his chief works are "Land Systems and Industrial Economy of Ireland, England, and Continental Countries" (1870), and a volume of essays on "Political and Moral Philosophy" (1879).



He was preparing a systematic treatise on economics, but lost his notes in 1872, and was not able to complete the work before his death.

MANTEUFFEL, BARON OTTO THEODOR VON, Prussian statesman, died November 27th. He was born February 8, 1805. After studying at Halle, he entered the public service in 1827. He rose through various civil and diplomatic positions to be Minister of the Interior under Count Brandenburg, in 1848, and took a conspicuous part in the suppression of the revolution. During the reactionary period of the '50's Manteuffel was prominent in the councils of the state. As director of the foreign policy he humbled his country before Russia and Austria, but assumed a firmer tone in the peace negotiations at Paris in 1856. The reactionary policy was cut short, and Baron Manteuffel permanently excluded from public affairs, upon the assumption of the regency by the present Emperor, in 1858.

OSBORNE, BERNAL, English politician, died January 4th. Descended from a family of Hebrew merchants, his father was Ralph Bernal. The son took the name of Osborne upon his marriage with an Irish heiress of that name. He was Secretary to the Admiralty under the Administration of Lord Aberdeen and under Lord Palmerston, until he lost his seat as member for Middlesex. Bernal Osborne was the Liberal wit of the House of Commons, but sometimes directed his sarcasms against his own party.

PALMER, Professor, an English Oriental scholar, was killed by Arabs, together with two officers, while visiting the tribes of the desert near Suez in quest of military information. He was born at Cambridge in 1840. He commenced life as a clerk in London, but had already begun the study of Arabic. After several years he abandoned commerce and studied at Cambridge University. He received the professorship of Arabic. He made several adventurous journeys in the East. In the last ten years of his life he published dictionaries of Arabic and Persian, grammars of various languages, a translation of the New Testament into Persian and of the Koran into English, and many other works.

RAFF, JOACHIM, a prolific Swiss composer; died at Frankfurt, June 25th. Born at Lachen, in Switzerland, May 27, 1824, he commenced life as a school-teacher, but embraced the musical profession on the strength of the favorable comments elicited from famous musicians by his first compositions. Although an advocate of the new school of music, which he defended in an able pamphlet on "The Wagner Question," he cultivated various styles and classes of music, with an eye to immediate success and popularity. He was a successful songwriter, less successful in his three operas, but a masterly composer of instrumental music of a high order, his chief productions being the symphony "Im Walde" and his celebrated "Leonora" symphony.

ROSSETTI, DANTE GABRIEL, painter and poet; died April 9th, at the age of fifty-four. He was the son of a noted Italian poet, who came to England as a political refugee. He became one of the most conspicuous representatives of the pre-Raphaelite school in art. He was a supremely gifted colorist, and as a delineator of female beauty he realized a type which contrasted strikingly with the conventional Academic prettiness. As a poet he employed language and rhythm to convey artistic impressions, and was the most typical and masterly of the modern sensuous school of English poets. The so-called æsthetic movement received its impulse and direction principally from the genius of Dante Rossetti.

RUSSEL, SCOTT, English engineer; died June 8th, in the Isle of Wight, at the age of seventy-four. He was the son of a Scottish clergyman, and was destined for the Church, but was allowed to enter a workshop and follow his mechanical taste. He afterward studied in Edinburgh University, and when only twenty-four years old filled provisionally the chair of Natural Philosophy. He began at this time researches into the nature of waves, with a view to improve the models of vessels. He discovered the wave of translation and developed the wave-line system of naval architecture. He was placed at the head of the great ship-yards at Greenock to introduce this system of instruction. In his own works on the Thames he built other vessels on the new system, among them the Great Eastern, in which another improvement of his invention, the longitudinal double-skin principle, was applied. Scott Russel was one of the first advocates of iron-clad war-vessels, and designed some of the first ironclads built for the British Government. His last work in naval architecture was the steamer to transport railroad-trains across the Lake of Constance. He planned important works in civil engineering, among them the dome for the Vienna Exhibition of 1873, a new high-level bridge across the Thames at London, etc.

SCHWANN, THEODOR, German scientist; died at Liège, in January. He was born at Neuss, near Düsseldorf, December 7, 1810. He was assistant to Johannes Müller in the Anatomical Museum in Berlin from 1834 to 1839, then Professor of Anatomy at Louvain, and since 1848 at Liège. Schwann was the author of the cell-theory, which was announced in 1839, and marks an epoch in biological science.

THOMSON, SIR CHARLES WYVILLE, English scientist; died March 10th, at the age of fifty-one years. He was the son of a surgeon, and was educated at Edinburgh University. He filled professorships in the Universities of Aberdeen, Cork, and Belfast. In 1867-'69 he took part in dredging expeditions of the Porcupine and Lightning, in 1870 took the chair of Professor of Natural History at Edinburgh, and in 1872 took charge of the scientific department of the Challenger expedition. He finished the first volume of the report of the three years'

expedition in 1877, and published also a treatise on the "Depth of the Sea," besides numerous contributions to scientific journals.

**OBLIGATION OF CONTRACTS.** That clause of the Federal Constitution which prohibits the States from passing any law impairing the obligation of a contract was elaborately considered by the Supreme Court of the United States in two important cases, decided early in 1883. In each case State legislation, relating to State bonds, was under review. One suit was brought by a holder of Virginia bonds, and the other by creditors of Louisiana. In each case the decision was in favor of the State. The opinions of the Court are of exceptional interest and importance, as an exposition of the constitutional powers of the States in dealing with their creditors.

**THE VIRGINIA CASE.**—In 1871 the principal of the State debt of Virginia, with its overdue and unpaid interest, amounted to more than \$45,000,000. The principal of this indebtedness had been incurred by the construction of various public works prior to the civil war. It was claimed that one third of this burden was to be borne by West Virginia, and this liability was recognized by the latter State in its first Constitution, adopted in 1863; but nothing was done by its Legislature toward making any provision for the payment of the debt. In 1871 Virginia undertook to make a settlement with its creditors, and for that purpose passed "an act to provide for the funding and payment of the public debt." After reciting that two thirds of the debt was the just proportion of Virginia, the act provided that the owners of the bonds, stocks, or interest-certificates of the State, with some exceptions, might fund two thirds of the amount of the same, together with two thirds of the interest due, in six per cent coupon or registered bonds of the State, having thirty-four years to run, but redeemable at the pleasure of the State after ten years, the bonds payable to order or bearer, and the coupons to bearer, at the Treasury of the State. The statute then declared that "the coupons shall be payable semi-annually, and be receivable at and after maturity for all taxes, debts, dues, and demands due the State, which shall be so expressed on their face; and the bonds shall bear on their face a declaration to the effect that the redemption thereof is secured by a sinking fund provided for by the law under which they are issued." For the remaining third of the amount of the bonds thus funded, the act provided that certificates should be issued to the creditors, setting forth the amount, with the interest thereon; and that their payment should be provided for in accordance with such settlement as might subsequently be made between the two States, and that Virginia would hold the surrendered bonds, so far as they were not funded, in trust for the holder or his assignees.

A large number of creditors accepted these

terms, surrendered their old bonds, and took new ones, with interest coupons annexed, for two thirds of their amount, and certificates for the balance. The amount of bonds surrendered was about thirty million dollars, for which new bonds, amounting to twenty million dollars, were issued. When the act of 1871 was passed, and when the interchange of bonds was made in conformity with its provisions, the law of Virginia afforded the holders of the new bonds the remedy of a mandamus from the Supreme Court of Appeals, to compel collectors to accept the coupons in payment of taxes.

Such was the law governing the rights and the remedies of the holders of these bonds and coupons, when, on January 14, 1882, was passed "an act to prevent frauds upon the Commonwealth, and the holders of her securities, in the collection and disbursement of revenues." After reciting that forged and spurious bonds and coupons were in existence, the act provides that the officer to whom coupons, issued under the act of 1871, are tendered in payment of taxes, debts, or demands due the State, "shall receive the same, giving the party tendering a receipt, stating that he has received the same for the purpose of identification and verification." The second section provides that "he shall at the same time require such taxpayer to pay his taxes in coin, legal-tender notes, or national bank bills, and, upon payment, give him a receipt for the same. In case of refusal to pay, the taxes due shall be collected as all other delinquent taxes are collected." Section 3 is as follows:

He shall mark each paper as coupons so received, with the initials of the tax-payer from whom received, and the date of receipt, and shall deliver the same, securely sealed up, to the judge of the county court of the county or hustings court of the city in which such taxes, debts, or demands are payable. The tax-payer shall thereupon be at liberty to file his petition in said county court against the Commonwealth. A summons to answer which petition shall be served on the Commonwealth's attorney, who shall appear and defend the same. The petition shall allege that he has tendered certain coupons in payment of his taxes, debts, and demands, and pray that a jury be impaneled to try whether they are genuine, legal coupons, which are legally receivable for taxes, debts, and demands. Upon this petition an issue shall be made in behalf of the Commonwealth, which shall be tried by a jury, and either party shall have a right to exceptions on the trial, and of appeal to the Circuit Court and Court of Appeals. If it be finally decided in favor of the petitioner that the coupons tendered by him are genuine, legal coupons, which are legally receivable for taxes and so forth, then the judgment of the court shall be certified to the Treasurer, who, upon the receipt thereof, shall receive said coupons for taxes, and shall refund the money before then paid for his taxes by the tax-payer out of the first money in the Treasury, in preference to all other claims.

Section 4 provides that whenever any taxpayer shall apply to any court for a mandamus to compel a collector to receive the coupons for taxes, it shall be the duty of the collector to make return to the mandamus that he "is



ready to receive said coupons in payment of such taxes, debts, and demands, as soon as they have been legally ascertained to be genuine." The act then prescribes the legal procedure by which the issue of genuineness is to be joined and decided.

The question raised by this legislation was whether the act of January, 1882, was in violation of that clause of the Federal Constitution which declares that no State shall pass any "law impairing the obligation of contracts." It was raised by Andrew Antoni, who, in March, 1882, tendered to Samuel O. Greenhow, treasurer of the city of Richmond, a coupon of the issue of 1871 for \$3.00, in payment of taxes. The tender was refused, whereupon Antoni applied to the Supreme Court of Appeals for a mandamus to compel its acceptance. The Treasurer answered that under the law of January, 1882, he could not receive the coupon until its genuineness was established as prescribed by that law. To this return a demurrer was filed. The four judges of the Supreme Court of Appeals divided equally on the question of the constitutionality of the law of January, 1882. The mandamus was accordingly denied, and an appeal was taken to the United States Supreme Court. The opinion of that court, upholding the constitutionality of the act, was delivered by Chief-Justice Waite, in March, 1883. Elaborate dissenting opinions were rendered by Justices Field and Harlan. Justice Matthews concurred in the judgment of the majority, but dissented from the grounds on which it was based. The Chief-Justice pointed out that the Supreme Court of Appeals of Virginia had held in two or three cases that in issuing the bonds of 1871 the State had entered into a valid contract with all persons taking the coupons to receive them in payment of taxes and State dues. The same principle was affirmed by the United States Supreme Court in the case of *Hartman vs. Greenhow*, decided at the October term, 1880, and reported in 102 United States Reports. "Any act of the State," says Chief-Justice Waite, "which forbids the receipt of these coupons for taxes is a violation of the contract, and void as against coupon holders."

But the question here is, continues the opinion, whether the act of 1882 violates any implied obligation of the State in respect to the remedies that may be employed for the enforcement of its contract, if the collector refuses to take them. It can not be denied that, as a general rule, laws applicable to the case, which are in force at the time and place of making a contract, enter into and form part of the contract itself, and that this embraces alike those laws which affect its validity, construction, discharge, and enforcement. But it is equally well settled that changes in the forms of action and modes of proceeding do not amount to an impairment of the obligations of a contract, if an adequate and efficacious remedy is left. As the Supreme Court said in the case of *Von*

*Hoffman vs. Quincy* (4 Wallace's Reports, 553), "it is competent for the States to change the form of the remedy, or to modify it otherwise, as they may see fit, provided no substantial right secured by the contract is thereby impaired. No attempt has been made to fix definitely the line between alterations of the remedy, which are to be deemed legitimate, and those which, under the form of modifying the remedy, impair substantial rights. Every case must be determined upon its own circumstances. Whenever the result last mentioned is produced, the act is within the prohibition of the Constitution, and to that extent void." In all such cases the question becomes, therefore, one of reasonableness, and of that the Legislature is primarily the judge. The Court ought never to overrule the decision of the Legislature unless a palpable error has been committed. If a state of facts could exist that would justify the change in a remedy which has been made, the Court must presume it did exist, and that the law was passed on that account. The Court has nothing to do with the motives of the Legislature, if what they do is within the scope of their powers under the Constitution.

The right of the coupon-holder, continued the Court, is to have his coupon received for taxes when offered. The question here is not as to that right, but as to the remedy the holder has for its enforcement when denied. After comparing the old with the new remedy, the Chief-Justice said:

The following changes are thus made in the old remedy: 1. The taxes actually due must be paid in money before the court can proceed, after the collector has signified in the proper way his willingness to receive the coupons, if they are genuine and in law receivable; 2. The coupons must be filed in the Court of Appeals; and, 3. They must be sent to the local court to have the fact of their genuineness and receivability determined, subject to an appeal to the Circuit Court and the Supreme Court of Appeals. As the suit is for a mandamus, all the provisions of the general law regulating the practice not inconsistent with the new law remain, and, if the petitioner succeeds in getting his peremptory writ, he will recover his costs. No issues are required that it would not have been in the power of the collector to raise before the change was made, and there is no additional burden of proof imposed to meet the issues, so that the simple question is, whether the requirement of the advance of the taxes and the change of the place and manner of trial impair the obligation of the contract on the part of the State to furnish an adequate and efficacious remedy to compel a tax-collector to receive the coupons in payment of taxes, in case he will not do it without compulsion.

The Court then proceeded to show that the change of remedy was not such as, in its opinion, was sufficient to impair the obligation of the contract. "The primary obligation of the State," it said, "is for the payment of the coupons. All else is simply as a means to that end. It matters not whether the coupons have been refused for the taxes, if full payment of the amount they call for is actually made in money. A remedy, therefore, which is ample for the enforcement of the payment of the



money, is ample for all the purposes of the contract. That, we think, is given by the act of 1882 in both forms of proceeding."

The Court concluded as follows:

In conclusion, we repeat that the question presented by this record is not whether the tax-collector is bound in law to receive the coupon, notwithstanding the legislation which, on its face, prohibits him from doing so, nor whether, if he refuses to take the coupon and proceeds with the collection of the tax by force, he can be made personally responsible in damages for what he does, but whether the obligation of the contract has been impaired by the changes which have been made in the remedies for its enforcement in case he refuses to accept the coupon. We decide only the question which is actually before us. It is no doubt true that the commercial value of the bonds and coupons has been impaired by the hostile legislation of the State, but this impairment, in our opinion, comes not from the change of the remedies, but from the refusal to accept the coupons without suit. What we are called upon to consider in this case is not the refusal to take the coupons, but the remedy after refusal.

Inasmuch as we are satisfied that a remedy is given by the act of 1882, substantially equivalent to that in force when the coupons were issued, we have not deemed it necessary to consider what would be the effect of a statute taking away all remedies.

Justice Field began his dissenting opinion by saying that the legislation of Virginia of 1882, which was sustained by the Court, appeared to him to be "in flagrant violation of the contract with her creditors under the act of March 30, 1871, commonly known as the funding act; and that the doctrines advanced by the Court, though not so intended, do, in fact, license any disregard of her obligations which the ill-advised policy of her legislators may suggest."

The clause of the Constitution, he continued, which declares that no State shall pass any law impairing the obligation of contracts, prohibits legislation thus affecting contracts between the State and individuals equally as it does contracts between individuals. What, then, was the obligation of the contract entered into between Virginia and her creditors under the funding act of 1871, so far as the interest coupons are concerned? The contract is, that she will pay the amount of the coupon, and that it shall, at and after maturity, be receivable for taxes, dues, and demands of the State. And by its receivability is meant that it is to be taken by officers whom the State may authorize to receive money for its dues whenever tendered them. By the obligation of a contract is meant the means which the law affords for its execution, the means by which it could at the time it was made be enforced. Justice Field then said:

The receivability of the coupon, under the funding act of 1871, for taxes, dues, and demands, gave to it, as already said, its principal value. At that time there was provided in the system of procedure of the State a remedy for the specific execution of the contract, by which this receivability could be enforced. The legislation of January 14 and April 7, 1882, deprives the holder of the coupon of this remedy, and in lieu of it gives him the barren privilege, after paying the taxes, of suing in a local court to test before a jury the genuineness of the coupon and its legal receivability for them, and, in case he establishes these facts, of having

a judgment to that effect certified to the Treasurer of the Commonwealth, and the amount paid refunded out of money in the Treasury, if there be any. To recover this judgment, he must pay the costs of the proceeding, including the fees of witnesses and jurors, and of the clerk, sheriff, and other officers of the court. This is a most palpable and flagrant impairment of the obligation of the contract. No legislation more destructive of all value to the contract is conceivable, unless it should absolutely and in terms repudiate the coupon as a contract at all. It is practical repudiation.

In *Bronson vs. Kinzie* this court, speaking by Chief Justice Taney, said: "It is difficult, perhaps, to draw a line that would be applicable in all cases between legitimate alterations of the remedy and provisions which, in the form of remedy, impair the right. But it is manifest that the obligation of a contract, and the rights of a party under it, may, in effect, be destroyed by denying a remedy altogether, or may be seriously impaired by burdening the proceedings with new conditions and restrictions, so as to make the remedy hardly worth pursuing. And no one, we presume, would say that there is any substantial difference between a retrospective law, declaring a particular contract or class of contracts to be abrogated and void, and one which took away all remedy to enforce them, or encumbered it with conditions that rendered it useless or impracticable to pursue it." (1 How., 317.)

In *Planters' Bank vs. Sharp* this court said: "One of the tests that a contract has been impaired is, that its value has by legislation been diminished. It is not, by the Constitution, to be impaired at all. This is not a question of degree or manner or cause, but of encroaching in any respect on its obligation, dispensing with any part of its force." (6 How., 327.)

In *Murray vs. Charleston* the court cited with approval the language of a previous decision to the effect that a law which alters the terms of a contract by imposing new conditions, or dispensing with those expressed, impairs its obligation; and added, speaking by Mr. Justice Strong, who recently occupied a seat on this bench, that "it is one of the highest duties of this court to take care the prohibition [against the impairment of contracts] shall neither be evaded nor frittered away. Complete effect must be given to it in all its spirit." (96 U. S., 448.)

In *Edwards vs. Kearzey* this court said, speaking by Mr. Justice Swayne, so lately one of our number: "The remedy subsisting in a State when and where a contract is made and is to be performed is a part of its obligation, and any subsequent law of the State which so affects that remedy as substantially to impair and lessen the value of the contract is forbidden by the Constitution, and is therefore void." (96 U. S., 607.)

And only two terms ago, in the case of *Louisiana vs. New Orleans*, this court said, without a dissenting voice, that "the obligation of a contract, in the constitutional sense, is the means provided by law by which it can be enforced, by which the parties can be obliged to perform it. Whatever legislation lessens the efficacy of these means impairs the obligation. If it tend to postpone or retard the enforcement of the contract, the obligation of the latter is to that extent weakened." (102 U. S., 205.)

How can it be maintained, in the face of these decisions, that the legislation of January 14 and April 7, 1882, does not impair the obligation of the contract under the funding act? It annuls the present receivability of the coupon; it substitutes for the specific execution of the contract a protracted litigation, and, when the genuineness of the coupon and its legal receivability for taxes are judicially established, its payment is made dependent upon the existence of money in the Treasury of the State. If the language of the act, declaring that, when the genuineness of the coupon and its receivability for taxes are established, the taxes paid by its holder shall be refunded out of the first money in the Treasury in preference to other claims, be deemed a sufficient appropriation to au-



thorize the Treasurer to pay out the money, contrary to what has just been decided with respect to language much more expressive in the legislation of Louisiana, of what avail can it be to the owner of the coupon if the Treasurer refuse to refund the amount? There is no mode, according to the opinion of the majority, of coercing his action. No mandamus can issue, for that remedy and all compulsory process have been abolished.

Besides all this, as the coupons are mostly for small amounts, the costs of the suits to test their genuineness and receivability for taxes would be more than their value. Practically, the law destroys the coupons, and it was evidently intended to have that effect. . . .

That there is any adequate and efficacious remedy substituted for the one in existence when the funding act was adopted, can not, it seems to me, be seriously affirmed. The remedy originally existing was effective. No officer could refuse to receive the coupon without subjecting himself to personal liability. After a tender no valid sale could be made for the taxes. And the creditor could invoke the compulsory process of the courts to secure a specific performance. Now all is changed. A law which practically destroys the value of the coupon is sustained. The officer is not bound to receive it, in the sense that he can not be compelled to take it. He can enforce the payment of taxes in money; he can sell property, if necessary, to collect them; he can wholly ignore the coupon, unless the holder should foolishly consent to incur double the amount in costs to establish by a jury trial its genuineness and legal receivability for taxes.

Justice Field concluded his dissenting opinion in these words: "I find myself bewildered by the opinion of the majority of the court. I confess that I can not comprehend it, so foreign does it appear to be from what I have heretofore supposed to be established and settled law. And I fear that it will be appealed to as an excuse, if not justification, for legislation amounting practically to the repudiation of the obligations of States, and of their subordinate municipalities—their cities and counties. It will only be necessary to insert in their statutes a false recital of the existence of forged and spurious bonds and coupons, as a plausible pretext for such legislation, and their schemes of plunder will be accomplished. No greater calamity could, in my judgment, befall the country than the general adoption of the doctrine that it is not a constitutional impairment of the obligation of contracts to embarrass their enforcement with onerous and destructive conditions, and thus to evade the performance of them."

Justice Harlan said, in his dissenting opinion, that "if the act of January 14, 1882, be upheld in its application to bonds issued under the act of 1871, it is difficult to perceive that the constitutional inhibition upon laws impairing the obligation of contracts is of the slightest practical value for the preservation of the rights of those dealing with States. Indeed, the act of January 14, 1882, in its necessary operation, as directly and effectually impairs the commercial value of the bonds and coupons issued under the funding act as would a statute which repudiated the bonds outright, and forbade the receipt of their coupons, under any circumstances, for taxes, debts, or demands due Virginia."

After explaining that the judgment of the Court was based on the ground that the obligation of the contract was not impaired by the changes made by the act of January 14, 1882, in the remedies for its enforcement, Justice Harlan proceeded:

Here is the radical difference between the majority of my brethren and myself. To my mind—I say it with all respect for my associates who have reached a different conclusion—it is so entirely clear that the change in the remedies has impaired both the obligation and value of the contract, that I almost despair of making it clearer by argument or illustration.

Under the contract the tax-payer, it is conceded, is entitled to have his coupon received for his taxes when tendered; while under the statute of January 14, 1882, the collector is forbidden to so receive it; and the tax-payer, in order to protect his property against levy or distraint, and relieve it from the encumbrance created by the assessment of taxes, must pay his taxes in money, and then, if he wishes to get his money back, prove to the satisfaction of twelve jurymen the genuineness and legal receivability of his coupons.

Under the contract, and the laws in force when it was made, the tax-payer is entitled, in the first instance, to enforce the receipt of his coupons for taxes by mandamus, the sole remedy then given to effect that result; while under the subsequent legislation he is denied the right to a mandamus until he first pays his taxes in money, and then proves to the satisfaction of twelve jurymen that they are genuine coupons, and legally receivable for taxes.

Under the contract and the laws in force when it was made, the tax-collector was not bound to resist an application for mandamus, and it is not to be presumed that he would do so unless he doubted the genuineness of the coupons tendered in payment of taxes; if, however, he did so, he became liable to pay the costs incurred by the tax-payer, when the latter succeeded; while under the act of January 14, 1882, all discretion is taken from the collector, and he is *required, although he may know the coupons to be genuine and legally receivable for taxes, to decline receiving them for taxes until the tax-payer, having first paid his taxes in money, shall prove them, to the satisfaction of twelve jurymen, to be genuine.*

And the remedy thus given by the statutes, passed after the contract was made, for the enforcement of the tax-payer's admitted right to have his coupon received for taxes, *when offered*, is pronounced to be adequate and efficacious, and not an impairment of the substantial rights given by the contract. My brethren—distinctly admitting that the legislation of 1882 is in hostility to the State's creditors, and has impaired the commercial value both of the bonds and their coupons—in effect, hold that such legislation does not burden the proceedings for the enforcement of the contract with any new conditions or restrictions inconsistent with, or which impair, its obligations. I can not assent to such conclusion, believing, as I do, not only that it is in direct conflict with every adjudged case cited, either by the court or by my brother Field, but that the new remedy is adequate and efficacious, not for the preservation and enforcement, but the destruction of the contract. The holders of the bonds and coupons are placed by the legislation of 1882 in the position where it is useless and impracticable to pursue the remedies thereby given. To my mind this is so perfectly apparent that I should have deemed it impossible that any different view could be entertained.

Justice Harlan concluded his opinion as follows:

Finally came the enactments of 1882, which have so changed the remedies existing when bonds were issued under the act of 1871 that tax-payers, holding



coupons of such bonds, can not use them in payment of taxes without expending more money to enforce compliance with their contract than the coupons are worth.

I can not agree that the courts of the Union are powerless against State legislation, which is so manifestly designed to destroy contract rights protected by the Constitution of the United States.

Without stopping to speculate upon the disastrous consequences which would result both to the business interests and to the honor of the country if all the States should enact statutes similar to those passed by Virginia, I sum up what has been so imperfectly said by me: If, as is conceded, Antoni is entitled by the contract to have his coupon received in payment of taxes, *when offered* for that purpose, and if, as is also conceded in the opinion of the majority, he was entitled, by the laws in force when the contract was made, to the remedy of mandamus to compel the tax-collector to receive his coupons and discharge *pro tanto* his taxes, it is clear that the subsequent statute does impair the obligation of the contract, by imposing new and burdensome conditions, which not only prohibit the collector from receiving coupons in payment of taxes *when offered*, but require the tax-payer to pay his taxes *in money*, not to be returned to him unless, upon the occasion of *each* tender of coupons, he submits (without the possibility of recovering his costs of suit) to a jury trial, and proves to the satisfaction of twelve jurymen that the coupons tendered are genuine, and legally receivable for taxes.

A separate opinion was also written by Justice Matthews, who concurred in the judgment of the Court, but not in the grounds on which the Court rested its decision. He agreed that the State of Virginia, by the act of 1871, entered into a valid contract with the holders of its bonds to receive their coupons in payment of taxes; and that any subsequent statute which denies this right is a breach of its contract and a violation of the Constitution of the United States. But for a breach of its contract by a State, no remedy is provided by the Constitution of the United States against the State itself; and a suit to compel the officers of a State to do the acts which constitute a performance of its contract by the State, is a suit against the State itself. If the State furnishes a remedy by process against itself or its officers, that process may be pursued because it has consented to submit itself to that extent to the jurisdiction of the courts; but if it chooses to withdraw its consent by a repeal of all remedies, it is restored to the immunity from suit, which belongs to it as a political community, responsible in that particular to no superior.

Justices Bradley and Gray concurred in the judgment on both grounds: that stated in the opinion of the court delivered by the Chief-Justice, and that presented by Justice Matthews.

THE LOUISIANA CASE.—In 1874 the Legislature of Louisiana passed an act providing for an issue of bonds for the purpose of consolidating and reducing the floating and bonded debts of the State. The bonds were payable to bearer forty years from January 1, 1874, and bore interest at the rate of seven per cent per annum, payable semi-annually. The Governor, Lieutenant-Governor, Auditor, Treasurer, Secretary of State, Speaker of the House

of Representatives, and a person to be elected by these officers as a fiscal agent of the State, were created a Board of Liquidation, with power to issue the bonds and exchange them for all valid outstanding bonds and certain warrants on the Treasury, at the rate of sixty cents in the new bonds for one dollar of old bonds and warrants. The act then provided for an annual tax levy of five and one half mills for the purpose of paying the principal and interest on the bonds, and declared that "the revenue derived therefrom is hereby set apart and appropriated for that purpose and no other." It was made a felony, punishable by imprisonment for not more than ten nor less than two years, for the fiscal agent, or any officer of the State, or Board of Liquidation, to divert the fund from its legitimate channel. The act further declared that "the interest tax aforesaid shall be a continuing annual tax until the said consolidated bonds shall be paid or redeemed, principal and interest; and the said appropriation shall be a continuing annual appropriation during the same period, and this levy and appropriation shall authorize and make it the duty of the Auditor and Treasurer, and the said board, respectively, to collect said tax annually, and pay said interest, and redeem said bonds, until the same shall be fully discharged." By other sections it was provided that any judge, tax-collector, or any other officer of the State, obstructing the execution of the act, or failing to perform his official duty, should be guilty of a misdemeanor; that each provision of the act should be a contract between the State and every holder of the consolidated bonds; that the tax-collectors should not pay over any moneys collected by them to any other person than the State Treasurer; and that no court or any judge should have power to enjoin the payment of principal or interest of any of the bonds, or the collection of the special tax therefor. Immediately after the passage of the act the following amendment to the Constitution was adopted:

The issue of consolidated bonds authorized by the General Assembly of the State, at its regular session in the year 1874, is hereby declared to create a valid contract between the State and each and every holder of said bonds, which the State shall by no means and in no wise impair. The said bonds shall be a valid obligation of the State in favor of any holder thereof, and no court shall enjoin the payment of the principal or interest thereof, or the levy and collection of the tax therefor; to secure such levy, collection, and payment, the judicial power shall be exercised when necessary. The tax required for the payment of the principal and interest of said bonds shall be assessed and collected each and every year until the bonds shall be paid, principal and interest, and the proceeds shall be paid by the Treasurer of State to the holders of said bonds, as the principal and interest of the same shall fall due, and no further legislation or appropriation shall be requisite for the said assessment and collection and for such payment from the Treasury.

Under this authority consolidated bonds to the amount of about twelve million dollars were issued.

In 1879 a new Constitution was adopted.



It took effect January 1, 1880. A part of this, called the "debt ordinance," reduced the interest on the consolidated bonds to two per cent per annum for five years, to three per cent for fifteen years afterward, and to four per cent thereafter, with a proviso that the holders of the bonds might exchange them for new bonds for seventy-five per cent on the dollar drawing four per cent interest. The Constitution further declared that the coupons of the consolidated bonds should be remitted, and that "any interest taxes collected to meet said coupons are hereby transferred to defray the expenses of the State government."

In January, 1880, after the above constitutional provisions went into operation, two suits to test their validity were brought by John Elliott, Nicholas Gwynn and Henry S. Walker, holders of bonds. One was brought in the United States Circuit Court to enjoin the several officers of the State composing the Board of Liquidation from recognizing the "debt ordinance" of the new Constitution, and from disregarding the provisions of the funding act and the Constitution of 1874. In the other suit, which was begun in the State Court and removed to the Federal Court, a mandamus was asked to compel these officers to apply the funds on hand to the payment of interest on the consolidated bonds, and also to proceed to collect the tax levied in accordance with the provisions of the act and the Constitution of 1874.

The question raised by these suits, and brought before the United States Supreme Court, was whether the "debt ordinance" provisions of the Constitution of 1879 impaired, in violation of the Federal Constitution, the obligation of the contract entered into between the State and its creditors by the act of 1874 and the Constitution of that year. The Supreme Court said that the language of the act and the Constitution of 1874 "shows unmistakably a design to make these promises and these pledges so far contracts, that their obligations would be protected by the Constitution of the United States against impairment;" and added that it is equally manifest that the object of the State in adopting the "debt ordinance" in 1879 was to stop the further levy of the promised tax, and to prevent the disbursing officers from using the revenue from previous levies to pay the interest falling due in January, 1880, as well as the principal and interest maturing thereafter." The Court admitted that the State had violated its contract, but held that there was no means of compelling it or its officers to carry out the contract. It was clear that the State itself could not be sued by these bondholders without its own consent, and this had never been given. "Neither was there when the bonds were issued," said Chief-Justice Waite, "nor is there now, any statute or judicial decision giving the bondholders a remedy, in the State courts or elsewhere, either by mandamus or injunction, against the State in its political

capacity, to compel it to do what it has agreed should be done, but what it refuses to do." The persons sued are the executive officers of the State, and they are proceeded against in their official capacity. The suits are to enjoin them from doing what the Constitution of 1879 requires them to do, and to compel them to do what that Constitution prohibits them from doing.

The question then is whether, notwithstanding the Constitution of 1879 on its face takes away the power of the executive officers of the State to comply with the provisions of the act of 1874, the contract can be enforced by coercing the agents and instrumentalities of the State, whose authority has been withdrawn in violation of the contract, without having the State itself in its political capacity a party to the proceedings. The relief asked will require the officers against whom the process goes to act contrary to the positive orders of the supreme political power of the State, whose creatures they are, and to which they are ultimately responsible in law for what they do. They must use the money in the Treasury and under their official control in one way, when the supreme power has directed them to use it in another, and they must raise more money by taxation when the same power has declared it shall not be done. The parties prosecuting the suits do not, in direct terms, ask for the payment only of the bonds and coupons which they hold. All that is asked will enure as much to the benefit of the other holders of similar obligations as to the particular parties to these suits. So that the remedy sought implies power in the judiciary to compel the State to abide by and perform its contracts for the payment of money, not by rendering and enforcing a judgment in the ordinary form of judicial procedure, but by assuming the control of the administration of the fiscal affairs of the State to the extent that may be necessary to accomplish the end in view.

It was argued that the money in the Treasury collected from the tax levied for 1879 constituted a trust fund of which the individual defendants were *ex-officio* trustees, and that they might be enjoined as such trustees from diverting it from the purposes to which it was pledged under the contract. On this point Chief-Justice Waite said:

The individual defendants are the several officers of the State, who, under the law, compose the Board of Liquidation. That board is in no sense a custodian of this fund. Its duty was to negotiate the exchange of the new bonds for the old on the terms proposed. It had nothing to do with levying the tax, collecting the money, or paying it out further than by purchasing the bonds with any surplus there might be from time to time in the Treasury over what was required to meet the interest. The provision in the law that it shall be the duty of the Auditor, Treasurer, and the board, respectively, to collect the tax, pay the interest, and redeem the bonds, evidently means no more than that the Auditor and Treasurer shall perform their respective duties under the general laws in the assessment and collection of the tax, and shall pay in the



usual manner the interest and principal of the bonds as they respectively fall due, and that the board shall purchase and retire the bonds whenever there is a surplus that, under the law, is to be used for that purpose.

The Treasurer of State is the keeper of the Treasury, and in that way is the keeper of the money collected from this tax, just as he is the keeper of other public moneys. The taxes were collected by the tax-collectors and paid over to the State Treasurer, that is to say, into the State Treasury, just as other taxes were when collected. The Treasurer is no more a trustee of these moneys than he is of all other public moneys. He holds them, but only as the agent of the State. If there is any trust, the State is the trustee, and unless the State can be sued the trustee cannot be enjoined. The officers owe duty to the State alone, and have no contract relations with the bondholders. They can only act as the State directs them to act, and hold as the State allows them to hold. It was never agreed that their relations with the bondholders should be any other than as officers of the State, or that they should have any control over this fund except to keep it like other funds in the Treasury and pay it out according to law. They can be moved through the State, but not the State through them.

The Court concluded its opinion as follows:

Little need be said with special reference to the suit for mandamus. In this no trust is involved, but the simple question presented is, whether a single bondholder, or a committee of bondholders, can, by the judicial writ of mandamus, compel the executive officers of the State to perform generally their several duties under the law. The relators do not occupy the position of creditors of the State demanding payment from an executive officer charged with the ministerial duty of taking the money from the public Treasury and handing it over to them, and, on his refusal, seeking to compel him to perform that specific duty. What they ask is that the Auditor of State, the Treasurer of State, and the Board of Liquidation may be required to enforce the act of 1874, and "carry out, perform, and discharge each and every one of the ministerial acts, things, and duties respectively required of them, . . . according to the full and true intent and purport of that act." Certainly no suit begun in the Circuit Court for such relief would be entertained, for that court can ordinarily grant a writ of mandamus only in aid of some existing jurisdiction. (*Bath County vs. Ames*, 13 Wallace, 247; *Davenport vs. Dodge County*, 105 U. S. Reports, 242.) Our attention has been called to no case in the State courts of Louisiana in which such general relief has been afforded, and the jurisdiction of the Circuit Court was, therefore, in no way enlarged through the operation of the removal acts, even if this is a case which was properly removed—a question we do not deem it necessary now to decide. The remedy sought, in order to be complete, would require the court to assume all the executive authority of the State, so far as it related to the enforcement of this law, and to supervise the conduct of all persons charged with any official duty in respect to the levy, collection, and disbursement of the tax in question until the bonds, principal and interest, were paid in full, and that, too, in a proceeding to which the State, as a State, was not and could not be made a party. It needs no argument to show that the political power can not be thus ousted of its jurisdiction and the judiciary set in its place. When a State submits itself, without reservation, to the jurisdiction of a court in a particular case, that jurisdiction may be used to give full effect to what the State has, by its act of submission, allowed to be done; and if the law permits coercion of the public officers, to enforce any judgment that may be rendered, then such coercion may be employed for that purpose. But this is very far from authorizing the courts, when a State can not be sued, to set up their jurisdiction over the officers in charge of the public moneys, so as to control them as against the political power in their

administration of the finances of the State. In our opinion, to grant the relief asked for in either of these cases would be to exercise such a power.

Elaborate dissenting opinions were written by Justices Field and Harlan. The former admitted that the common law rule, that the sovereign can not be sued in his own courts without his consent, applies in this country to the State, under which designation are included the people within its territorial limits, in whom resides whatever sovereignty the State possesses. "But they act and speak in this country, at least in times of peace, only through the Constitution and laws. For their will we must look to these manifestations of it. If in that way they consent to suits, either directly against themselves by name or against any of their authorized agents, there can be no reasons of policy or of law against issuing process in proper cases to bring them or their agents before the court. And if in that way, that is, by their Constitution or laws, they direct their officers to do or omit certain things, in the doing or omission of which individuals are interested, and they provide appropriate remedies to compel or enjoin the performance of those things, there can be no reason why such remedies should not be resorted to when private rights are involved." After reviewing the legislative and constitutional enactments of 1874, and the "debt ordinance" part of the Constitution of 1879, Justice Field remarked: "Of course the new Constitution in these provisions is a repudiation of the engagements of the act of 1874 and of the constitutional amendment of that year, and a direct violation of the inhibition of the Federal Constitution against the impairment of the obligation of contracts." He then said:

Is this inhibition against the repudiation by the State of her engagements of any efficacy? The majority of the court answer, "No." I answer, adhering to the doctrines taught by a long line of illustrious judges preceding me, "Yes, it is"; and, though now denied, I feel confident that at no distant day its power will be reasserted and maintained. In that faith I dissent from the judgment of my associates, and I shall continue to do so on all proper cases, until the prohibition inserted in the Constitution as a barrier against the agrarian and despoiling spirit which both precedes and follows a breach of public faith is re-established in its original vigor.

The question whether the court will restrain the diversion of the funds in the hands of the Treasurer, a member of the Board of Liquidation, is to be considered precisely as though the new Constitution had never been adopted. The inhibition of the Federal Constitution is upon the State, and not merely upon her Legislature. All the authority which her people can confer, whether by constitutional enactment or legislative provision, is subject to the inhibition. Her people are at all times under the Constitution of the United States, subject to its restrictions as they are entitled to its privileges. They can not lawfully insert in any constitution or organic law provisions contravening that instrument. . . .

If the new Constitution had never been adopted, there could be no question as to the power of the State courts to require that the moneys collected be applied to the payment of the interest. It would not only have been the duty of the Board of Liquidation



to thus apply them, but it would have been a felony to refuse to do so. Now, whatever enactment, constitutional or legislative, impairs the obligation of the contract with the bondholders, that is, abrogates or lessens the means of its enforcement, is void. Therefore, the new Constitution, as to that contract, is to be treated as though it never existed. . . .

No reason in law, therefore, any more than in morals, can be given why the mandates of the act of 1874 and the constitutional amendment of that year should not be carried out. There is nothing in the fact that the defendants are officers of the State. The books are full of cases where executive and administrative officers of a State have been required by the judiciary to do certain acts, or been enjoined from doing them. And it has not been deemed an answer to the proceeding that the State was interested in the controversy.

There could be no doubt, Justice Field added, that, but for the "debt ordinance" in the Constitution of 1879, a mandamus or other compulsory process could have been issued by the courts of Louisiana, under the code of procedure of that State, to compel officers of the State and of the Board of Liquidation to execute the provisions of the act of 1874, and of the constitutional amendment of that year. But, independently of the code, the constitutional amendment of 1874 expressly gave the courts of the State jurisdiction to issue such compulsory process by the clause which declares that, to secure the levy, collection, and payment stipulated, "the judicial power shall be exercised when necessary," and that means, said Justice Field, "such power as properly belongs to judicial tribunals to enforce the performance by public officers of duties imposed upon them by law." In the opinion of Justice Field, this means of enforcing the contract which was given by the State when the contract was made could not afterward be taken away by the State, as it was by the Constitution of 1879, without impairing the obligation of the contract in violation of the Federal Constitution.

OHIO. The State officers for the year were as follow: Governor, Charles Foster, of Seneca County; Lieutenant-Governor, R. G. Richards, of Jefferson County; Attorney-General, G. K. Nash, of Franklin County; Treasurer, Joseph Turney, of Cuyahoga County.

FINANCES.—On the 15th day of November, 1881, the public funded debt of the State was \$5,201,665. During the year there was paid the loan payable July 1, 1882, bearing 4 per cent interest, \$300,000. On the 15th day of November, 1882, the public funded debt of the State was \$4,901,665. This sum consists of the following loans:

Loan payable after December 31, 1886, bearing 6 per cent interest.....	\$2,400,000 00
Loan payable July 1, 1883, bearing 4 per cent interest.....	325,000 00
Loan payable July 1, 1884, bearing 4 per cent interest.....	350,000 00
Loan payable July 1, 1885, bearing 4 per cent interest.....	350,000 00
Loan payable July 1, 1886, bearing 4 per cent interest.....	375,000 00
Loan payable July 1, 1887, bearing 4 per cent interest.....	500,000 00

Brought forward.....	\$4,900,000 00
Loan payable July 1, 1888, bearing 4 per cent interest.....	600,000 00
Canal loan, not bearing interest.....	1,665 00
Total funded debt.....	\$4,901,665 00

The local debts at the same time were as follow:

Debts of counties.....	\$2,660,297 64
Debts of cities, first and second class.....	88,849,598 43
Debts of incorporated villages.....	1,311,380 83
Debts of townships.....	605,715 24
Debts of separate (special) school districts.....	1,389,414 88
Total local debts.....	\$45,766,351 22

Net increase in above local debts from last year, \$1,652,250.47. This increase is as follows:

Increase in counties.....	\$437,618 86
Increase in cities.....	940,244 63
Increase in villages.....	265,512 87
Increase in townships.....	148,307 64
Total.....	\$1,781,678 50
Deduct decrease in school districts.....	129,428 03
Leaving net increase as above.....	\$1,652,250 47

The balances in the Treasury to the credit of the several funds at the close of the fiscal year 1881 were as follow:

General revenue fund.....	\$254,518 83
Sinking fund.....	208,265 69
State common-school fund.....	85,642 19
Total.....	\$501,421 11

The receipts into the Treasury during the year from all sources amounted to.....

Total receipts, including balances.....	\$6,270,396 22
Disbursements for same period.....	5,620,219 29

Leaving cash balance in the Treasury, November 15, 1882.....

Leaving cash balance in the Treasury, November 15, 1882.....	\$640,176 93
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The above balance is to the credit of the following funds, to wit:

General revenue fund.....	\$418,856 29
Sinking fund.....	208,892 70
State common-school fund.....	17,927 94
Total.....	\$640,176 93

TAXATION.—The value of all the taxable real estate and personal property in Ohio, according to the consolidated tax duplicate for 1882, is as follows:

Real estate in cities, towns, and villages.....	\$413,999,976 00
Real estate not in towns, cities, and villages.....	702,681,679 00
Chattel property.....	518,229,079 00
Total taxable values for 1882.....	\$1,634,910,734 00

Net increase in the valuation, as compared with 1881.....

Net increase in the valuation, as compared with 1881.....	\$47,703,185 00
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The taxes for the fiscal year 1883, levied upon the foregoing basis of \$1,634,910,734, are as follow:

General revenue fund ( $1\frac{1}{2}$ of a mill).....	\$2,285,587 47
Sinking fund ( $\frac{1}{2}$ mill).....	816,299 70
Common-school fund (1 mill).....	1,633,911 00

Total for State purposes ( $2\frac{1}{2}$ mills).....	\$4,735,748 17
County expenses.....	\$2,584,913 74
The poor.....	762,189 87
Bridges.....	1,570,440 26
Buildings.....	737,489 94
Roads.....	1,036,388 68
Payment of debts.....	693,409 35
Total for county purposes.....	\$7,884,776 84

Local taxation as follows:

Township expenses.....	\$1,006,093 87
School and school-houses.....	6,843,699 68
City, town, and village taxes.....	7,125,177 57
Other special purposes.....	1,582,489 25

Total township, city, school,  
and special taxes.....\$16,507,459 87

Total county and local taxes levied in 1882.....\$28,892,286 71

Total levies made in 1882 for all purposes.....\$28,627,984 85  
Per capita tax on dogs—sheep fund.....281,688 00

Total levies made in 1882 (including per  
capita dog-tax) for all purposes.....\$28,859,617 85  
Add delinquencies and forfeitures of previous  
years.....1,990,801 08

Total taxes for 1882, including delinquen-  
cies, etc.....\$30,850,418 91

**BANK-STOCKS.**—There is quite a noticeable increase in the amount of capital invested in the stock of national banks over what was reported last year. This increase is confined almost entirely to the large cities of the State.

The valuation and taxation of the property of such banks for this year are as follow :

The total valuation of national banks, as equalized by the several county and city Boards of Equalization for the year 1881, was.....	\$21,778,313 20
The valuation of this class of property, as equalized by the several county and city Boards of Equalization for the year 1882, is.....	25,855,688 41
An increase over the valuation of 1881 of.....	3,577,370 21
Total valuation of State banks for taxation, as fixed by the several county and city Boards of Equalization for 1881, was.....	1,186,238 09
The valuation of this class of property, as fixed by the several county and city boards for 1882, is.....	1,406,390 00
An increase over the valuation of 1881 of.....	220,156 91

**CANAL REVENUES.**—The report of the Board of Public Works shows revenues from the canals as follow :

Miami and Erie Canal.....	\$98,764 67
Ohio Canal.....	57,708 27
Muskingum Improvement.....	17,659 56
Hocking Canal.....	5,614 43
Walwhonding Canal.....	1,573 89
Total.....	\$181,316 12

The total receipts of the year, including appropriations by the Legislature, were \$226,748.97; total disbursements, \$222,059.94. This, added to \$4,000 fraudulently drawn out by the defaulting clerk of the board, makes a total of expenditures \$226,059.99, and leaves a balance of \$688.98 in the State Treasury to the credit of the canal fund. The number of boats on the different canals is given as follows:

Hocking, 241 private boats, 11 State boats, and 3 dredges; Miami and Erie, 97 private boats, 8 State boats, and 2 dredges; Muskingum River, 9 steamers, 43 flat barges, and 10 United States boats.

**RAILROAD STATISTICS.**—The statistics of the Railroad Commissioner of the State are made up each year to June 30th. The report for the year ending June 30, 1882, shows the average number of miles of railroad operated during the year to have been 6,040, an increase over the previous year of 3·504 per cent.

The total stock and debt on June 30, 1882, was \$483,963,079.83; the average amount of stock and debt of the roads operated during

the year was \$439,252,387.64, being an increase of 14·92 per cent; the net earnings have been equal to 3·115 per cent of the above amount of stock and debt, or to \$14,694,210.92.

The gross earnings amounted to \$46,737,163.80, or 1·9095 per cent increase. Of this amount \$12,335,239.73 were received from passenger-traffic, an increase of 19·52 per cent; \$32,312,140.94 were from freight, a decrease of 3·302 per cent; \$1,143,532.43 were from mail, an increase of 20 per cent, and \$1,146,385·55 were from "other sources," an increase of 32·88 per cent.

The operating expenses amounted to \$32,042,952.88, an increase of 9·35 per cent. The maintenance of way and structures made up \$7,149,722.84 of this amount, being an increase of 5·94 per cent; the cost of conducting transportation was \$12,485,529.06, an increase of 9·90 per cent.

The operating expenses were 68·55 per cent of gross earnings, as against 64·14 per cent for the previous year.

The number of passengers carried during the year has increased 27·95 per cent, and have been equal in amount to each inhabitant of the State being a passenger about four times. The passenger mileage has increased 19·417 per cent, while the rate per mile received from each has decreased from 2·336 to 2·310, or 1·114 per cent.

The total tonnage carried during the year has increased 10·76 per cent, and has been equal to about nine tons moving for each inhabitant of the State. The total ton-mileage has increased 8·37 per cent, and the rate per ton per mile has decreased from ·015 cents to ·807 cents, or 11·863 per cent.

In comparing the year 1882 with the year 1872, it is found that the mileage has increased 59·51 per cent; the gross earnings, 36·43 per cent; the operating expenses, 35·34 per cent; the passengers carried, 142·04 per cent; the passenger mileage, 99·95 per cent; the freight tonnage, 191·93 per cent; and the ton-mileage, 181·98 per cent, while the rate paid per passenger has decreased from 2·935 cents to 2·310 cents, or 21·295 per cent; and the rate per ton per mile has decreased from 1·569 cents to ·807 cents, or 49·2 per cent.

**MILITIA, ETC.**—By the report of the Adjutant-General it is shown that the present force of the Ohio National Guard consists of 79 companies of infantry, one troop of cavalry, and six batteries of light artillery, and a total number of 5,875 men, including officers, being a reduction of 1,469 during the year.

No call has been made by the civil authorities for the militia to aid them in the preservation of peace and order.

The allowance obtained by the agent of the State, of \$67,674 in settlement of suspended war claims against the General Government, has been collected, and paid into the Treasury. A further allowance of \$70,043.96 has been secured, and reported by the Secretary of the



Treasury to Congress, for appropriation for its payment.

The report of the Inspector of Mines shows a marked reduction in the number of accidents in mines, the continued application of a more improved system of working and ventilation, and a growing feeling of harmony between the employers and employes in this industry, which has for so long a time been marked by bitter and prolonged contests, often resulting in lawlessness.

**EDUCATION.**—The State School Commissioner furnishes the following educational statistics of the State: Number of youth of school age in the State in September, 1882, 1,081,321; number of youth of school age in the State in September, 1881, 1,063,337; number of school-houses in township districts, 10,968; number of school-houses erected within the year, 528; cost of school-houses within the year, \$1,123,688; estimated value of school-houses, including grounds, \$23,610,858; number of teachers necessary to supply schools, 17,117; number of different teachers actually employed, 24,135; average number of weeks the schools were in session, 81; number of pupils enrolled in the schools, 751,101; average number of pupils in daily attendance, 483,232; number of school-officers, 52,151; total receipts, including balance on hand September 1, 1881, \$12,236,357.63; total expenditures, \$8,335,475.48.

**AGRICULTURE.**—The report of the State Board of Agriculture, made up to December 1st, places the acreage of wheat sown at 2,741,560, and the yield at 38,506,370 bushels. The yield of corn is placed at 87,386,260 bushels; oats, 16,732,154 bushels; potatoes, 6,131,725 bushels.

**LIVE-STOCK.**—According to the returns made to the Auditor of State, the number and value of the live-stock were as follow: Horses, 714,585, valued at \$42,207,878; cattle, 1,518,755, value \$26,941,612; mules, 22,891, value \$1,563,452; sheep, 4,594,607, value \$13,383,249; hogs, 1,624,077, value \$6,587,148.

**SOCIAL STATISTICS.**—The social statistics of the State, as reported to the Secretary of State, show that during the year there were 30,528 marriages; 69,914 births; 34,173 deaths; 1,228 persons sent to insane asylums; 18,266 paupers supported in and out of the county infirmaries, at a cost of \$828,146.87; number of persons in the benevolent institutions November 15, 1882, 178 blind, 431 deaf and dumb, 499 idiotic and imbecile, 677 in soldiers' and sailors' orphans' home; number in penitentiary during the year, 1,767; in work-houses, 4,674; boys and girls in reform and industrial schools, 1,426.

**THE LIQUOR QUESTION.**—The most exciting political question of the year was that of legislation affecting the traffic in intoxicating liquors. The Legislature organized January 2d, with 22 Republicans and 11 Democrats in the Senate, and 70 Republicans and 35 Democrats in the House—an exact two-thirds Republican vote in

each branch. In his message Governor Foster brought the temperance question before the Legislature by this statement of the situation:

All good citizens deplore the evils growing out of the intemperate use of intoxicating liquors. Our jails, penitentiary, work-houses, reform schools, infirmaries, insane asylums, and other institutions of like character, are largely made necessary because of this evil. The framers of the Constitution recognized this fact, and empowered the General Assembly "to provide against the evils resulting from the sale of intoxicating liquors."

The subject has been discussed year after year, in and out of the General Assembly, and laws have been enacted which, if enforced, would largely mitigate the evils; but, for the want of a public sentiment sufficiently strong to secure their enforcement, they are practically inoperative. Public opinion to-day is divided mainly into two classes as to the character of further legislation upon the subject. One class insists upon the prohibition of the manufacture and sale of intoxicating and malt liquors, while the other proposes a tax upon the traffic, coupled with restrictions upon its sale, with severe penalties imposed for violations of the law.

The Cleveland Convention, recognizing the fact that both of the foregoing propositions are of doubtful constitutionality, adopted the following as the views of the convention and of the party it represented, for the purpose of relieving the subject of this doubt, viz.:

"Resolved, That the public interests require that the General Assembly should submit to a vote of the people such amendments to the Constitution of the State, relative to the manufacture, sale, and use of intoxicating liquors, as shall leave the whole matter to legislation."

This resolution was made the subject of earnest discussion prior to the last election, and extraordinary efforts were made to defeat the party that adopted it. After the fullest discussion, the people sustained the party by an unprecedented majority, and thus approve the action of the convention.

The duty of the General Assembly is thus marked out by the people, viz., the submission of constitutional amendments to the people essentially embodying the substance of the resolution.

The propriety of submitting three amendments, one favoring local option, another the prohibition of the manufacture and sale, and a third the taxation of the traffic with well-guarded restrictions, is earnestly recommended. This course will give the people, the source of all power, an opportunity to express themselves, and thus give the great value of popular approval to the successful proposition.

The recommendation of the Governor was not taken up in earnest until March 8th, when, after a hot debate, the House passed a joint resolution providing that a proposition to amend the Constitution of the State of Ohio be submitted to the electors of the State on the second Tuesday of October, A. D. 1883, as follows:

SECTION 1. A license to traffic in spirituous, vinous, and malt liquors may be granted under such regulations and limitations as shall be provided by law. At the said election the electors desiring to vote in favor of the adoption of said amendment shall have placed upon their ballots "License to Traffic in Intoxicating Liquors, Yes," and those desiring to vote against the adoption of said amendment shall have placed upon their ballots "License to Traffic in Intoxicating Liquors, No"; and if a majority of all the ballots cast at said election shall contain the words "License to Traffic in Intoxicating Liquors, Yes," the said amendment shall be adopted, and shall constitute the separate section to Article XV of the Constitution described in section 18 of the schedule thereto, and the



said original separate section of said Article XV shall be repealed.

SEC. 2. That at said election on said second Tuesday in October, A. D. 1883, a proposition to amend the Constitution by an additional separate section to said Article XV shall also be submitted in the words and figures following, to wit: The General Assembly may by law restrict and prohibit the traffic in spirituous, vinous, and malt liquors, or may impose a special tax on persons engaged therein, or may by law provide for submitting to the electors of State, counties, townships, cities, and incorporated villages at special elections, the option of prohibiting the traffic in spirituous, vinous, and malt liquors therein, to be determined by a majority of all the electors voting at such an election, and shall provide for the enforcement of such option by appropriate legislation.

While the House was passing this proposition, the Senate adopted another in the following form:

That the additional section to Article XVI of the Constitution, as described in section 18 of the schedule thereto, be so amended as to read as follows: And said additional section to Article XVI of the Constitution as described in section 18 of the schedule thereto be repealed.

SECTION 18. The General Assembly of the State of Ohio shall have absolute power to legislate concerning the manufacture and sale of spirituous, vinous, and malt liquors in the State of Ohio. It may provide against the evils resulting therefrom, and regulate, restrain, tax, license, or prohibit by law the manufacture or sale thereof.

The House resolution came up in the Senate several weeks later, was amended to conform to the proposition originally passed by the Senate, and in this form was passed. The House disagreed to the amendment and the measure went to a committee of conference, where it remained at the adjournment of the Legislature.

At the beginning of the session a bill was introduced in the Senate by Mr. Pond, providing for the taxation of the traffic in intoxicating liquors. The leading features of the bill were taxation and the filing of a bond, but there were a number of other regulations tending to restrict and embarrass the traffic. The annual tax on each dealer, in cities of the first class, was placed at \$300; in cities of the second class, having a population of 10,000 or more, \$250; in villages or cities, with a population between 2,000 and 10,000, the tax was put at \$200; in villages having less than 2,000 population, \$150; and in all parts of the State outside a village or city and its surrounding belt, as designated in the law, the dealer was required to pay \$100—the tax to be paid into the County Treasury, upon the certificate of the County Auditor.

Every person engaged in the traffic was required to file with the Probate Court his penal bond in the sum of \$1,000, with two freeholders as sureties, the fee to the Probate Judge being \$2.

To engage or continue in the traffic without filing the required bond, or after the bond has been declared forfeited, subjected the offender to a fine of \$500 to \$1,000, or imprisonment in the county jail from thirty days to a year, or both fine and imprisonment.

The bill was reported by the Committee on the Judiciary early in March, amended so as to declare that the tax was not a license, and then passed by a bare constitutional vote of 17 to 15. It lay in the House nearly a month, and was then passed by a vote of 56 to 40.

Almost immediately after the bill became a law, the municipal elections came on. The Germans were indignant at the passage of the bill, and at the progress made with the Smith Sunday bill, which also became a law within a few days. The liquor-dealers in the large cities organized for the election, and the result was an overwhelming defeat of the Republicans in the larger cities of the State. That only served to consolidate the anti-liquor element in the Legislature. The Smith Sunday bill was passed, and an attempt to modify the more stringent features of the Pond bill was defeated.

CONSTITUTIONALITY OF THE ACT.—During the discussion in the Legislature over the Pond bill, the question of its constitutionality was frequently raised. After its passage there was a general desire that this question should be disposed of at the earliest possible moment. A case was made in Crawford County and sent at once to the Supreme Court, which immediately took it under advisement. The decision of the court was given May 30th, by Chief-Justice Okey, declaring the Pond law unconstitutional. The Court held—

1. The constitutionality of a statute depends upon its operation and effect, and not upon the form it may be made to assume.

2. A license is permission granted by some competent authority to do an act which, without such permission, would be illegal.

3. The act of April 6, 1882, entitled "An act more effectually to provide against the evils resulting from the traffic in intoxicating liquors" (79 Ohio Laws, 66), which requires every person engaged or engaging in such traffic to pay a specified sum of money annually, and execute a bond as therein required, and also provides that "every person who shall engage or continue in such traffic without having executed the bond, or after his bond shall have been adjudged forfeited, shall be deemed guilty of a misdemeanor," is in operation and effect a license within the inhibition of the section of the Constitution which provides that "no license to traffic in intoxicating liquors shall hereafter be granted in this State."

During the session of the Legislature some excitement was caused by the charge that parties in the interest of a Cincinnati railway company had attempted to bribe legislators. An investigating committee reported that two of the members of the House had been guilty of misconduct and should be censured, and that two persons not members had violated the laws in attempting to bribe members. The grand jury of Franklin County found indictments against the two members and one of the alleged lobbyists. Neither of the cases came up for trial during the year, but at the first term of the court in 1883 the cases against the members failed, there being no evidence offered in support of the charges.

The Legislature adjourned, April 17th, until



the first Tuesday in January, 1883, one of its last acts being the passage of a bill to redistrict the State for congressional purposes.

**POLITICAL CONVENTIONS.**—The Republican State Convention was held in Columbus, June 7th. The following ticket was placed in nomination: For Secretary of State, Charles Townsend, of Athens County; for Supreme Judge, John H. Doyle, of Lucas County; for member of Board of Public Works, C. A. Flickinger, of Defiance County.

The following were among the resolutions:

We tender to President Chester A. Arthur our assurance of confidence in his administration, and our approval of the moderate and patriotic course pursued by him amid the embarrassing circumstances unavoidably attending such a national crisis.

*Resolved*, That we fully indorse the administration of Governor Charles Foster, and the State administration of the Republican party during the last two years, under which the expenditures of the State were reduced over one half a million dollars below the expenditures of the Democratic administration of the two preceding years, and the public debt of the State reduced nearly a million and a quarter of dollars, and the remainder of the debt redeemable the 30th of June, 1881, refunded at a rate of interest below 3½ per cent per annum.

*Resolved*, That we condemn the terrible outrages and persecutions inflicted upon the Jews of Russia and other sections of Europe; and while we heartily approve the action of the Government in its efforts to ameliorate the condition of these unfortunate people, we earnestly solicit a continuance of its most energetic efforts to that end.

*Resolved*, That we indorse and affirm the principle of protection to American industry as adopted at the last National Republican Convention.

*Resolved*, That the tax-paying people of the State demand that by specific taxation the traffic in intoxicating liquors shall be made to bear its share of the public burdens, and that the Constitution, in so far as it may be an obstacle in the way of the exercise by the people, through their representatives, of practical control over the liquor-traffic, to the end that the evils resulting therefrom may be effectually provided against, should be amended at the earliest date allowed by law.

The Democratic State Convention met at Columbus, July 20th, and placed in nomination the following ticket: For Secretary of State, James W. Newman, of Scioto County; for Supreme Judge, John W. Okey, of Franklin County; for member of Board of Public Works, Henry Weeble, of Van Wert County.

The following were among the resolutions adopted:

The Democratic party, in convention assembled, reaffirm the great principles which are the foundation of free government, among which are equal rights to all, special privileges to none, protection of the weak against the encroachments of the strong, equal taxation, free speech, free press, free schools, and first of all a free and incorruptible ballot.

*Resolved*, That we favor a tariff levied to meet the actual needs, and so adjusted in its details with a view to equality in the public burdens as to encourage productive industries, and afford labor a just compensation without creating monopolies.

*Resolved*, That stability in the value of money is a primary requisite to industrial commercial prosperity. This can only be secured by maintaining both gold and silver as money, as provided by the Constitution, and subjecting the issue and regulation of paper

money to established principles, which will prevent fluctuations in the value of the currency.

*Resolved*, That the growth of monopolies is such as to seriously threaten the rights of individuals and the public welfare, and ought to be provided against by proper legislation.

*Resolved*, That the Democratic party has ever maintained, and still steadfastly adheres to, the doctrine of the largest liberty consistent with the public welfare, and is opposed to legislation merely sumptuary.

**ELECTION RETURNS.**—Prohibition and Greenback tickets were also put in nomination. The election was held October 10th, and resulted in an overwhelming Democratic success. The full official vote was as follows:

#### SECRETARY OF STATE.

James W. Newman, Democrat.....	816,874
Charles Townsend, Republican.....	297,759
Ferdinand Schumacher, Prohibition.....	12,202
George L. Hafer, Greenback.....	5,845

#### JUDGE OF SUPREME COURT.

John W. Okey, Democrat.....	815,758
John H. Doyle, Republican.....	299,889
John W. Roseborough, Prohibition.....	12,290
Lloyd G. Tuttle, Greenback.....	5,882

#### MEMBER OF BOARD OF PUBLIC WORKS.

Henry Weeble, Democrat.....	815,858
Charles A. Flickinger, Republican.....	299,688
Carmi Alderman, Prohibition.....	12,240
Lambert B. Stevens, Greenback.....	5,892

The congressional contest resulted in the election of thirteen Democrats and eight Republicans, with notice of contest in the Eighteenth District. The official figures are as follows:

#### FIRST DISTRICT.

Benjamin Butterworth, Republican.....	18,721
John F. Follett, Democrat.....	14,540
Charles C. Benton.....	22

#### SECOND DISTRICT.

Amor Smith, Republican.....	14,166
Isaac M. Jordan, Democrat.....	15,983

#### THIRD DISTRICT.

Emanuel Shultz, Republican.....	15,882
R. M. Murray, Democrat.....	16,106
William McKee, Prohibition.....	446
William H. Miller.....	77

#### FOURTH DISTRICT.

Jacob S. Conklin, Republican.....	9,688
Benjamin LeFever, Democrat.....	16,596
Zeno C. Payne.....	7
William Dillon.....	184

#### FIFTH DISTRICT.

Lovell B. Harris, Republican.....	11,006
George E. Seney, Democrat.....	16,619
Martin Deal, Prohibition.....	287
John Seitz, Greenback.....	235

#### SIXTH DISTRICT.

Joseph H. Brigham, Republican.....	15,480
William D. Hill, Democrat.....	16,201
E. T. Hayes, Prohibition.....	426
George Loutzenheiser, Greenback.....	510

#### SEVENTH DISTRICT.

Henry L. Morey, Republican.....	14,451
James E. Campbell, Democrat.....	14,410
Samuel K. Mitchell, Prohibition.....	156
C. C. Parker.....	49

#### EIGHTH DISTRICT.

J. Warren Kofer, Republican.....	14,897
J. H. Young, Democrat.....	13,171
Joseph R. Smith, Prohibition.....	1,000
A. S. Platt, Greenback.....	122

NINTH DISTRICT.	
James S. Robinson, Republican.....	15,864
Thomas E. Powell, Democrat.....	15,458
William Bonar, Prohibition.....	1,217

TENTH DISTRICT.	
Charles A. King, Republican.....	18,490
Frank H. Hurd, Democrat.....	14,534
J. H. Rhoads.....	237
N. E. Prentiss.....	22
J. W. Luce.....	178

ELEVENTH DISTRICT.	
J. W. McCormack, Republican.....	15,288
John P. Leedom, Democrat.....	13,037
Alva Crabtree.....	183
David Bennett.....	111

TWELFTH DISTRICT.	
Alphonso Hart, Republican.....	16,898
Lawrence T. Neal, Democrat.....	16,888
Daniel Hill, Prohibition.....	748
C. C. Parker.....	26

THIRTEENTH DISTRICT.	
H. C. Drinkle, Republican.....	14,092
George L. Converse, Democrat.....	17,766
Zeno C. Payne, Prohibition.....	823
Thomas P. James, Greenback.....	606

FOURTEENTH DISTRICT.	
Rollin A. Horr, Republican.....	12,604
George W. Geddes, Democrat.....	14,277
John W. Bell, Prohibition.....	991

FIFTEENTH DISTRICT.	
Rufus R. Dawes, Republican.....	18,048
A. J. Warner, Democrat.....	13,739
William Reese.....	841
Smith Branson.....	112

SIXTEENTH DISTRICT.	
A. B. Clark, Republican.....	14,422
Beriah Wilkins, Democrat.....	19,748
Jay Odell.....	6
Joseph Judkins.....	268

SEVENTEENTH DISTRICT.	
Jonathan T. Updegraff, Republican.....	14,165
Foss J. Alexander, Democrat.....	18,265
Thomas S. Luccock, Prohibition.....	361
N. C. Horton, Greenback.....	322

EIGHTEENTH DISTRICT.	
William McKinley, Jr., Republican.....	16,906
Jonathan H. Wallace, Democrat.....	16,898
Lemuel T. Foster, Prohibition.....	976
James A. Brush, Greenback.....	261
J. K. Buskirk.....	1
John H. Wallace.....	4
Major Wallace.....	1
Wallace.....	5
W. H. Wallace.....	2
W. W. Wallace.....	1
Jonathan Wallace.....	5
Major Wallace.....	3
Jonathan H. Wallace.....	1

NINETEENTH DISTRICT.	
Ezra B. Taylor, Republican.....	15,789
David L. Rockwell, Democrat.....	7,708
George E. Smith, Prohibition.....	1,090
Reuben T. Harmon, Greenback.....	553

TWENTIETH DISTRICT.	
Addison S. McClure, Republican.....	13,980
David R. Paige, Democrat.....	14,090
Jay Odell, Prohibition.....	1,189
Harlow P. Smith, Greenback.....	131

TWENTY-FIRST DISTRICT.	
Sylvester T. Everett, Republican.....	11,408
Martin A. Foran, Democrat.....	15,946
William H. Doan, Prohibition.....	1,999

**OIL, CALMING WAVES WITH.** The calming effect of a film of oil spread over the surface of agitated water has been often observed, although many have supposed the ancient saying referring to it to be based upon

a superstition. Many instances have been recorded of vessels and cargoes being saved in an overwhelming sea by pouring oil overboard. James Shields, a Scotch engineer, observed that some oil accidentally spilled in a pond stirred by the wind, spread over the neighboring surface and stilled the waves almost instantaneously. He tried the experiment of pouring about a quart of oil into a rubber pipe two or three yards long in another pond. It rose in bubbles, and with wonderful rapidity covered the pond and reduced the billows. Living on a coast where severe storms render the entrance to the ports extremely dangerous to the numerous small craft fishing and coasting in the neighboring seas, he utilized this property of fatty liquids to prevent the frequent disasters of the regions of the British coast deprived of harbors of refuge. He tried the effect of a few bottles of oil at Peterhead Harbor on a stormy day. The result was encouraging, and convinced him that moderate quantities of oil discharged at the right spot, and at the right moment, would enable vessels to make the port in dangerous times. He determined to give the principle a practical test. From the rocky coast he laid an iron pipe, two hundred yards long, with a gutta-percha hose attached to the end running two hundred yards farther. A storm occurring, he was gratified to see a schooner, lying to outside unable to enter, towed in half an hour after oil was pumped through the pipes. The rubber tube became separated and was replaced by a lead pipe, which was also destroyed by the rolling fragments of rock. He afterward fitted up an apparatus at the mouth of Aberdeen Harbor, in which the lead pipe was protected by bags of cement. At Peterhead the oil was discharged through three conical valves twenty-five yards apart. In the Aberdeen experiment, pipes of three fourths of an inch aperture, instead of inch-pipe as before, were employed, and two valves were deemed sufficient. Mr. Shields defrayed the expenses of all the experiments described, out of his own purse. He succeeded in drawing the attention of the Government and of all engineers to the matter, and then left it in the hands of the Board of Trade, which carefully watched the results of the trials at Aberdeen.

The effect of oil in calming waves has been known from the times of antiquity. Pliny speaks of divers spitting oil in the water to quiet the surface, so that the light will penetrate. The divers of the Mediterranean follow the practice to the present day. Hunters of the otter know the spot where they are devouring their oily prey, from the calmness of the water. The track of a wounded whale or porpoise is, in like manner, indicated by the streak of still water. It has often been remarked that a dead whale always floats in calm water, however agitated the sea may be round about. The spears of the salmon in the Scottish Highlands often pour oil on the



water to enable them to see into the depth of the pools. The fishermen of the Bermudas and the oyster-fishers of Gibraltar employ the same device. The herring-fishers of England detect schools of oil-bearing fish by the stillness of the surface. The same phenomenon enables the Cornish fishermen to find the sardine. The inhabitants of the Isle of St. Kilda attach cakes of the grease of sea-fowl to the sterns of their boats to prevent the waves from breaking and driving them against the rocks. The Shetland-Islanders understand the efficacy of oil in stilling the violence of the sea, for as they return in their frail craft from the fisheries when the weather is tempestuous, they cut out the livers of the cod which they have caught, as a last resort, and express the oil to save themselves from being swamped.

Dr. Franklin was the public writer who recognized the value of oil in preventing marine disasters. His attention was attracted to the subject by a letter recounting how a Dutch master saved his vessel from being overwhelmed in a tempest by pouring overboard a small quantity of olive-oil. Franklin was reminded of the fact that the water was always still when there were whalers in Newport Harbor. He experimented in a pond upon a windy day, and found that only a spoonful of oil poured on the water from the windward side spread over a wide space, and produced an instantaneous calm. He repeated the experiment upon a stormy day in the sea off Portsmouth, New Hampshire. While the sea was covered with whitecaps round about, no waves broke in the wake of his boat. He noticed also that a bark was drawn into this smooth track as by a whirlpool. The Scotch publishers, Chambers, endeavored to impress upon the public the utility of this means of rescue, by publishing accounts of ship-captains on the subject. Individual captains have employed oil to break the force of heavy seas, and made a practice of taking it with them for the purpose; but the generality of mariners treated these well-attested instances with apathy and doubt. A New York captain in a report published in 1867, in the "Shipping List," attributed the salvation of his vessel on two occasions to pouring out a few gallons of oil. Captain Betts, of the King Cenric, bound from Liverpool to Bombay, weathered a hurricane only by suspending canvas sacks of oil from the ship's side, with small punctures to allow the oil to trickle out. Captain Richardson, of Bristol, overtaken by a storm near the Bermudas, escaped by the same means. The captain of the Diamond, of Dundee, shipwrecked off Anholt Island, having heard of the escape of a storm-stressed whaler in the South Seas through the accidental breakage of some barrels of oil, furnished each boat with a few quarts of oil to pour over the stern, by which means the waves were kept from washing over them, and the crew reached land in safety. The diminutive sail-boat in which two Italian

captains acquired notoriety, in 1881, by crossing the Atlantic from Buenos Ayres, would, on several occasions have been lost if they had not used liberally their cargo of oil to assuage the seas. Since the revival of the subject through the efforts of Shields, sea-captains have been more impressed with the value of this simple safeguard. A captain recently arriving in New York attributed his escape from a storm in the North Atlantic to the oil-bags with which he had provided himself. Another captain withstood a terrific squall in the Bay of Biscay by the same means. A third, Captain Floreman, of the Dundee Clipper Line, passing through a four days' gale on his return from Calcutta, suspended bags of oil from the vessel. Waves of the largest size rolled to within twice the length of the ship, but the area protected by the slowly escaping oil was a dead level.

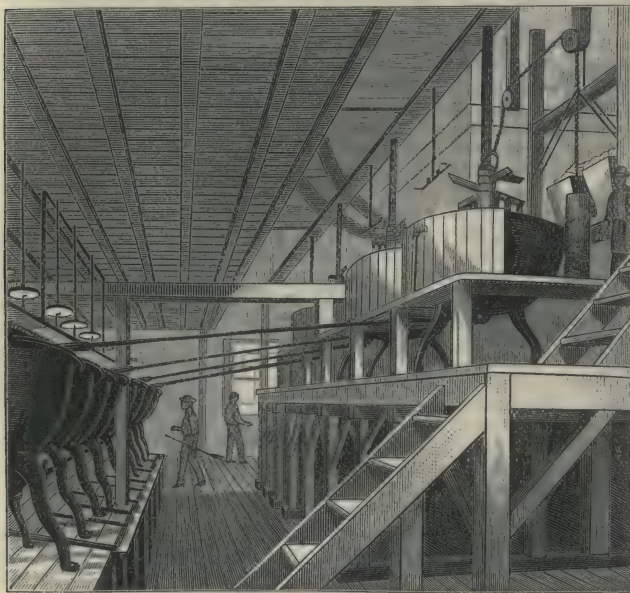
The cost, bulk, and weight of a provision of oil carried on board for safety, are offset by the saving of trouble and labor in a tempest, aside from the prime object of security of lives, ships, and cargoes. Many a life could be saved by attaching a small oil-bag to the life-buoys thrown to persons lost overboard, which can be pierced with a knife at the instant it is thrown out, and by the calming effect of the oil will reveal from afar the position of the swimmer. Vessels of oil provided with stopcocks on life-boats, and projectiles which would burst on striking the water and spread oil over the surface, have likewise been proposed for the life-saving service.

**OLEOMARGARINE.** Properly speaking, this name is applied to the butter-fat obtained by the process of M. Niége. Oleomargarine butter, or butterine (as it is called by some), is the product obtained by churning oleomargarine with milk, which, being colored and salted, has the look and taste of butter. About a dozen years ago, M. Hippolyte Niége, a French chemist and philosopher, undertook various experiments, by direction of Government, to see if it were possible to find, for the use of the navy and poorer classes, a product suited to take the place of ordinary butter, and which could be kept without becoming rancid. By experimenting largely upon milk, he discovered that milk always contained butter-fat, even when cows had been partially or wholly deprived of food. M. Niége next tried to produce this butter-fat from the fat of the cow, by artificial processes; and he finally succeeded in getting a pure and sweet fat, free from foreign odor, which, by churning with milk, was converted into what was considered excellent butter.

The process by which this is accomplished may be described more in detail, as follows: The fat of the cow (or beef fat) is thrown piece by piece into large tanks containing tepid water, where it remains for an hour or two, when the water is drawn off and fresh water brought into the tank. Each piece is then

separately inspected and thrown into another tank containing pure water, where it remains about the same time as at first. Pieces rich in oil are the only ones thrown into this tank; all the others are cut off and put into tierces, to be rendered into tallow. The fat in the second tank is again inspected and passed into a third, after which third washing it is a perfectly pure white fat. The next step is to elevate this fat, in cars holding about 600 pounds each, to the top of the building or third floor, alongside the disintegrating machines. These are like the regular meat-hasher. This machine consists of a series of sharp blades set on an axis like the thread of a screw. A closely-fitting chamber or cylinder placed horizontally contains these blades. The cylinder is divided into two portions, hinged together on one side,

ing-point by the introduction of live steam, which in turn heats the caldron containing the fat, causing it to melt at a temperature of from  $114^{\circ}$  to  $122^{\circ}$  F. Much care is taken to prevent getting above  $122^{\circ}$ , since the lower the temperature is kept the better is the product obtained. During this rendering process about 5 per cent of ordinary salt is added, which helps the membrane to settle. Each caldron or kettle holds about 2,300 pounds of fat, which is the usual product of an hour's work of the hashing machine. As soon as the fat falls into the kettle, the steam is turned on to heat the water in the jacket, after which the heat thus accumulated is found sufficient to finish the process. When the fat is completely rendered, cold water is poured into the jacket. Something over two hours is occupied from the



the hasher begins before the fat is allowed to rest. Revolving agitators keep the mass in constant motion during the rendering process, thus equalizing the temperature and facilitating the rendering. When the fat finally comes to a rest, a membrane (or "scrap") settles to the bottom of the kettle, and the pure fat is left on the top. Usually the separation is complete and satisfactory; but in case the fat has become water-soaked in the washing process, it is necessary to agitate the whole mass rapidly several times, after which the membrane will sink to the bottom. The rendered fat is left at rest about half an hour, when the pure fat is ready to be drawn off and strained into the "settling-kettles."

The water in the jacket is heated to the boil-

oil in the condition of froth floats on the surface of the rendered fat, which is ladled off. The rendered fat remains in the settling-kettles from one to three hours, and is kept at a temperature of  $118^{\circ}$  to  $122^{\circ}$  F., the water in the jacket being kept at about  $135^{\circ}$ . When the settling is complete, and the refined fat is at the proper temperature, it is drawn off through a fine sieve into tanks or cars, which are immediately removed to the "seeding-room," which is kept at a temperature of  $85^{\circ}$ . In this room the fat begins to solidify very slowly, the more solid constituents crystallizing out at first, the whole mass at last assuming a kind of mushy consistency. The "seeding" or crystallizing process requires from thirty-six to forty-eight hours, and must not be hurried. When the rendered fat is in the proper condition, it is pressed so as to separate the butter-oil from the stearine.



To accomplish this, the fat is packed in cloths set in moulds, to form packages  $13 \times 5\frac{1}{2} \times 2$  inches. These packages are placed on plates of galvanized iron in the press, one above the other. Each plate holds twelve bags, and from thirty-six to forty plates are used in each hydraulic press. The packages contain from two to three pounds of fat, so that each press, when filled, holds about 1,200 pounds. About an hour is required to fill a press. Before it is completely filled, the butter-oil flows from each package, from the weight of the plates above; and when the press is entirely full, a gradually increasing pressure is applied, amounting at last to about 3,000 pounds to the square inch. This pressure is kept up until the butter-oil ceases to flow from the bags or packages, leaving a cake of stearine perfectly dry, hard, and white. The press is then unpacked, and the cakes of stearine, taken from the bags, are in a condition to be packed for shipment. The butter-oil is received into a large reservoir, and if it is to be shipped it flows into perfectly clean tierces, where, after solidifying, it is sealed up. In this state the butter-oil will keep for an almost indefinite period. A large quantity is exported to Europe, to be churned with milk into butter. The name "oleomargarine" was given to this butter-oil because it was thought to be composed principally of oleine and margarine; but Heintz and Gössman have shown that margarine is not a simple fat, but a compound consisting of palmitine and stearine. Hence the term is really a misnomer.

The oleomargarine of commerce is largely used as a cheap cooking butter. It is a light-yellow substance, melts in the mouth like butter, and has a rather agreeable taste. When butter-oil is not to be used for shipment or consumption in its present state, it is pumped while warm from the reservoir, over to the dairy-room, where it is received in large cylindrical kettles, which keep it at the proper temperature for use in the next operation. It is now to be churned with milk, and thus converted into "butterine," or "oleomargarine butter." The accompanying illustration represents that section of the dairy-room known as the churning department. The churns in this room hold about 600 pounds of material, viz., 442 pounds of butter-oil, 120 pounds of milk, 87½ pounds of cream-made butter, and

1½ ounces of bicarbonate of soda. This mixture is churned for some five to ten minutes, when some coloring matter is added, and the churning continued for thirty to forty minutes longer. The first agitation forms a perfect emulsion, and the continued motion supplies to it a homogeneous color.

At the time oleomargarine butter was first made in the United States, by Paraf, the contents of the churn, after the operation, were allowed to flow out into tubs, and, on being solidified, were worked on tables with salt, then packed, and offered in market. The butter thus made was crystallized, which gave it a gritty taste, and prevented its being sold. As



no one experimented in the direction given by Niége, the sale was very limited for a year or so. Dr. Henry A. Mott, of New York, began a series of experiments to prevent crystallization, with excellent results, which have generally been adopted by manufacturers. The process, as simplified and perfected by Dr. Mott, is as follows: The churned mixture, a creamy-looking emulsion, is allowed to flow from the churns directly on pounded ice, which is kept in rapid motion until the whole mass becomes solid. By this process crystallization of the butter is wholly prevented. The ice absorbs the sensible (and in part the latent) heat of the emulsion, not giving it time to crystallize. This congealed emulsion is left in contact with the ice for two or three hours, when the mass is dumped out on inclined tables. The larger pieces of ice are picked out, and the smaller ones melt out through the heat of the room, which is kept from 85° to 90°. The butter is then left to soften for six or eight hours. When



the mass has become soft and all the ice and ice-water been removed, the product is chopped up with wooden ladles, and then put into a small apparatus, which has for its bottom a coarse wire sieve, through which the product is pressed, so that it comes out in shreds of various length, and about an eighth of an inch in diameter. It is then placed on tables, and worked and salted by a revolving butter-worker turned by hand. The butter is now ready to be packed in tubs. In case prints or rolls are to be made, it stands for several hours until it gets harder. Dr. Mott suggested a further churning for a few minutes with milk, to increase the butter odor and flavor; but it was found after a time to be more expensive than beneficial, and so was abandoned.

M. Niéges's process for preventing crystallization gives a butter far superior to that now produced. This fact was made known in 1880 by Mr. George Harding. Experiments conducted, under his direction, by Professors Chandler and Williams and Dr. H. A. Mott, resulted in the production of a butter superior in flavor, odor, and texture to any previously made. The process is as follows: The emulsion from the churn is to be put into a tin vessel, which can be closed, having an agitator within which receives its motion from outside. This vessel is placed in water with pieces of ice, at a temperature of about 36°. The agitator is kept in motion as long as it can be turned, when the solidified whipped product is ready to be removed. A large ice-cream freezer of the capacity of forty quarts gives good results. As, by this process, the emulsion in solidifying does not come in contact with the ice or ice-water, the congealed mass retains its flavor and odor unimpaired. The butter thus obtained is considered very suitable for winter use, as it is much softer than that made by throwing the emulsion on ice.

There are several large factories in the United States engaged in this industry. At the works of the Commercial Manufacturing Company, New York, 50,000 pounds of butter are made daily, and finds a ready sale at fifteen to twenty-two cents per pound, according to the season and the form in which it is put up. By law, every tub or package of butter sold must be branded "oleomargarine butter," so that there may be no mistake, and no selling this for butter obtained by churning the milk of the cow. In order to make 50,000 pounds of butter, 122,000 pounds of fat are required. This amount of fat yields nearly 42,000 pounds of butter-oil or oleomargarine, which, adding 20 per cent for milk and salt taken up, yield fully 50,000 pounds of butter. The returns, then, are: 50,000 pounds of butter, at 15 cents = \$7,500; stearine, tallow, scrap = \$3,300; total, \$10,800. Expenses of working, wages, material, etc., show that the cost of making butter in this way is about 14½ cents per pound. There are other factories in Philadelphia, Baltimore, Pittsburg, Louisville, Chicago, St. Louis, Cin-

cinnati, New Haven, Providence, and Boston. During July and August butter is not made, but the butter-oil is made and stored for use in the colder months. Dr. Mott has made a careful analysis of oleomargarine butter, from which it appears that its constituents are: Water, 11.203; butter solids, 88.797 = 100. The constituents of cream butter are: Water, 11.968; butter solids, 88.032 = 100. Thus it seems plain that every element which enters into the composition of the best dairy butter is to be found in oleomargarine butter, and no element is present in the latter which is not present in the former. Oleomargarine butter which has, under the microscope, identically the same appearance as butter made from cream, but has less of the volatile fats in it, keeps sweet and pure for a much longer period than dairy butter—an advantage of no little consequence for various purposes.

In addition to the above, it seems desirable to give the laws passed by the Legislature of New York on this subject, and also the patents under which imitation butter and cheese are made:

CHAPTER 215. An Act to regulate the manufacture and sale of oleomargarine, or any form of imitation butter and lard, or any form of imitation cheese, for the prevention of fraud and the better protection of the public health. Passed May 24, 1882.

The people of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. No person, persons, firm, or corporation manufacturing with intent to sell any article or substance in semblance of natural butter or natural cheese not the legitimate product of the dairy, and not made exclusively from milk or cream, or both, with salt or rennet, or both, and with or without coloring matter or sage, but into which any animal, intestinal, or offal fats, or any oils or fats of any kind whatsoever not produced from milk or cream, or into which melted butter, lard, or tallow shall be introduced, shall add thereto or combine therewith any annatto or compounds of the same, or any other substance or substances whatsoever, for the purpose or with the effect of imparting thereto a color resembling that of yellow (or any shade of the same) butter or cheese; nor shall they introduce said coloring matter into any of the articles of which the same is composed.

SEC. 2. No person, persons, firm, or corporation shall deal in, sell, expose for sale, or give away any article or substance in semblance of natural butter or natural cheese, described in the first section of this act and known as oleomargarine, or imitation butter and lard, or imitation cheese; and no keeper of any hotel, restaurant, boarding-house, or other place of public entertainment shall keep, use, or serve either as food for their guests or for cooking purposes any such imitation butter or cheese which shall contain any of the coloring matter therein prohibited, or be colored contrary to the provisions of this act.

SEC. 3. No person, persons, firm, or corporation shall manufacture, with intent to sell, deal in, sell or expose for sale any article or substance in semblance of natural cheese not the legitimate product of the dairy, and not made exclusively of milk or cream, or both, but into which any animal, intestinal, or offal fats or oils of any kind whatsoever, not produced from milk or cream, shall be introduced, unless the words "imitation cheese" shall be plainly stenciled, in plain Roman letters at least one half inch in length, with durable paint, upon the sides of each and every cheese, and also upon the outside of top and opposite sides of each and every box containing the same, in letters and with paint as before mentioned and described.



SEC. 4. For the purposes of this act the terms "natural butter" and "natural cheese" shall be understood to mean the products usually known by these names, and which are manufactured exclusively from milk or cream, or both, with salt and rennet, and with or without coloring matter or sage.

SEC. 5. Every person, firm, or corporation violating the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than \$50 nor more than \$200, or by imprisonment in the county jail for not less than ten nor more than thirty days, or by both such fine and imprisonment for each and every offence, in the discretion of the Court, one half of such fine to be paid to the complainant, the other half to be paid to the officer or officers having charge of the poor fund of the town where such prosecution occurs, for the support of the poor; or, if the poor of such town are supported by the county, then such moneys shall be paid to the officer or officers having charge of the poor fund of the county in which said town is located, to be used for the support of the poor of such county. But nothing in this act shall be so construed as to interfere with or abridge any right obtained, secured, or guaranteed by any law of Congress, or by any patent duly granted by the United States Government.

SEC. 6. This act shall take effect sixty days after it becomes a law.

CHAPTER 214. An Act to prohibit the coloring of oleomargarine, butterine, and adulterated cheese. Passed May 24, 1882, three fifths being present.

The people of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Every person who shall use, or permit any person in his employment to use, anatto or any other substance for the purpose of coloring the article in semblance of butter known as oleomargarine, or butterine, or any cheese which has been adulterated by the use of lard or any other greasy substance, with an intent to sell the same for food, or who shall sell or expose for sale any oleomargarine, butterine, or adulterated cheese which has been colored contrary to the provisions of this act, shall be guilty of a misdemeanor, and upon conviction shall be punished by a fine of not less than \$50 nor more than \$200, or by imprisonment in the county jail for not less than thirty nor more than ninety days, or by both such fine and imprisonment, for each and every offence. But nothing in this act shall be so construed as to interfere with or abridge any right obtained, secured, or guaranteed by a law of Congress, or by any patent duly granted by the United States Government.

SEC. 2. This act shall take effect on the 1st day of September, 1882.

#### THE MÉGE PATENT.

United States Patent Office.—Commercial Manufacturing Company (Consolidated) of New York, N. Y., assignee, by Mesne assignments, of Hippolyte Mége, deceased. Treating animal fats. (Specification forming part of reissued letters patent No. 10,137, dated June 13, 1882. Original No. 146,012, dated December 30, 1873; reissue No. 5,868, dated May 12, 1874; reissue No. 8,424, dated September 24, 1878. Application for reissue filed May 20, 1882.)

The processes set forth in the specification attached are those which have been fully described in the preceding pages of this article.

What is claimed is: 1. The improved material herein described, produced by treating animal fats so as to remove the tissues and other portions named, with or without the addition of substances to change the flavor, consistency, or color, as set forth. 2. The process herein described of treating animal fat in the production of oleomargarine.

The Commercial Manufacturing Company Consolidated.  
CHARLES M. FIELD, President.  
Witnesses: GEORGE H. SONNEBORN, WILLIAM H. SONNEBORN.

#### THE COSINE PATENT.

United States Patent Office.—Garret Cosine, of New York, N. Y., "Improvement in Processes for making Artificial Butter." (Specification forming part of Letters Patent No. 173,591, dated February 15, 1876; application filed December 21, 1875.)

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Garret Cosine, of the city, county, and State of New York, have invented an improved process of making artificial butter, of which the following is a specification:

My invention relates to the manufacture of butter for table use from oleine and margarine, as obtained from animal fats, fruits, and vegetable nuts, with lactic acid and loppered cream or milk.

To obtain the oleine and margarine from animal fats, I take any given quantity of animal fat and cause the same to be cut or minced by any suitable machine for the purpose, after which I place the fat in a vessel and subject it to a heat that will cause the whole mass to become fused; I then place the liquid fat in other vessels, and allow it to remain and cool until the degree of Fahrenheit is from eighty to ninety degrees, and when in this state I place a portion in bags of cloth. These bags are then placed in a press and subjected to a high pressure, which causes the oleine and margarine to free itself from the stearine and fibrous tissue.

The above shall be known and designated as oleine and margarine No. 1.

The process above described will give the same results as described by Chevreul in "Brande's Work of Chemistry," page 482, and published in the year 1829.

To obtain the vegetable oleine and margarine, I use any one of the following articles of commerce, viz.: oil peanut, oil sweet almonds, and oil olives.

To produce the lactic acid, I take fourteen parts cane sugar, sixty parts water, four parts caseine, and five parts chalk. This mixture is kept at a temperature of 80° to 95° Fahr. for eight or ten days, or until it becomes a crystalline paste of lactate lime. This is pressed in a cloth, dissolved in hot water, and filtered. This solution is then concentrated by evaporation. The acid is obtained from this lactate by treating it with the equivalent quantity of sulphuric acid and filtering from the insoluble gypsum. The solution of lactic acid I make as follows: One drachm of lactic acid and sixteen ounces of water. The solution of lactic acid assists digestion; it prevents the product from becoming deteriorated before use, and it assists also in giving the product a butyaceous consistency. By the use of lactic acid all putrefactive and catalytic action is arrested, which action would take place if such acid were not added, and by this means there is prepared an article which is fit for use at any time, and which will preserve its original state and flavor.

To obtain the loppered cream or milk, I take the cream as obtained from the surface of milk, or milk as obtained from the cow, and place it in open vessels, and allow it to remain until the putrefactive and catalytic action has taken place. When in this state it will be ready for use.

To obtain the margarine from the oleine and margarine No. 1, I take a given quantity of oleine and margarine designated as No. 1, and place it in a water bath and subject it to heat until the same assumes a semi-liquid state; then I place it in bags of cloth. These bags are then placed in a press and subjected to a high pressure, when the oleine will free itself from the margarine.

The above shall be known and designated as oleine No. 2.

I find that the composition of butter made from cows' milk, according to Robin, Verdel, and described by Dalton in his work of "Human Physiology," page 320, and published in the year 1867, is as follows: "In one hundred parts—margarine, sixty-eight parts; oleine, thirty parts; butyrine, two parts. And it being a fact that butter made from cows' milk does not con-



tain the same proportion of oleine and margarine in summer as in winter, it having a larger proportion of oleine in the winter, and having described the several articles that I use, and to enable others skilled in the art to make and use my discovery or invention, I will now give my improved process for making butter for winter and summer use.

To manufacture butter for table use in the winter by my improved process, I take and place in a suitable vessel nine parts of oleine No. 2, one part of fruit or nut oil, one part of solution lactic acid, one part of loppered cream or milk, as hereinbefore described. I then cause the same to be rapidly agitated with a revolving skeleton beater, until the whole assumes the consistence of butter made of cream taken from cows' milk, after which I add coloring matter, and then remove the mass upon a table or other suitable receptacle, and then work it until all the fluid portions are expressed. I then add salt to suit the taste, when it will be ready for use.

To manufacture the above for summer use, I take and place in a suitable vessel nine parts of oleine and margarine No. 1, one part of margarine as obtained from No. 1, one part of solution lactic acid, one part of loppered cream or milk, as hereinbefore described, and proceed as I do in making the same for winter use.

What I claim as my invention, and desire to secure by letters patent, is:

1. The process of making artificial butter by mixing together oleine and margarine from animal fats, and from fruit and vegetable nuts, and lactic acid, and loppered cream or milk, substantially as described.

2. The process of making artificial butter by mixing together oleine and margarine from animal fats, and lactic acid, and loppered cream or milk, substantially as described.

3. The process of preventing artificial butter from becoming deteriorated before use, and giving it a butyraceous consistence, by mixing with it lactic acid, substantially as described.

GARRET COSINE.

Witnesses: JOHN R. LEFFERTS, E. W. COSINE.

By a comparison in detail of what is set forth in the Cosine specification with the processes described in previous pages as forming the Mége patent, the reader can judge of the merits of the course pursued by each, and the results thus far attained. Whether oleomargarine butter is to be a permanent industry, may perhaps be open to doubt; but it has capital and enterprise enough embarked in it to give it a fair and thorough trial.

**OPIUM QUESTION IN CHINA AND INDIA.** The Chinese Government have lately appealed to Great Britain for release from the tyrannous conditions exacted as the result of the two opium wars by which they are restrained from prohibiting the import of, or placing deterrent duties upon, Indian opium. The Chefoo convention, which the British Government has refused to ratify, and the treaties with the United States and with Russia, in which stipulations against the importation of the drug were inserted, indicate a determination to grapple with the Chinese national vice with more energy than they have yet shown; though the anti-opium clauses in the two treaties were placed there merely for effect, and the task is almost hopeless until the British and Indian Governments grant them the release for which they pray. Outside of official circles there is a growing sentiment in favor of allowing the Chinese to attempt the suppression of the vice

and removing the immoral treaty obligations which tie their hands; but the \$40,000,000 of Indian opium revenue is an argument which weighs with the British public almost as strongly as with the responsible statesmen, as its loss would probably have to be made good out of the pocket of the British tax-payer. The Society for the Suppression of the Opium Trade, in recommending that the culture, which is carried on in Bengal under Government supervision, should be confined to supplying the demand for medicinal purposes, boldly propose to have the derangement which would follow in Indian finances averted by raising the revenue in Great Britain—the only rational solution of the problem. The people of England naturally listen favorably to every objection, reasonable or specious, to a step which involves the payment of taxes for the benefit of their fellow-subjects in India—a reversal of conditions to which, perhaps, no considerations of morality or national honor can force them.

The sincerity of the Chinese Government in their efforts to exterminate the opium-traffic are at once called in question. If they are in earnest, why do they not suppress the cultivation of the poppy in China? The only object of the Chinese is declared to be the transfer of the opium revenue from the Indian Exchequer to their own, or the protection of the native opium. Such motives, which would be sufficient for any government not wearing the yoke of conquest, are considered iniquitous on the part of the Chinese. But when an honest purpose to destroy the evil which is sapping the vigor and morality of the Chinese people is made apparent, Sir George Birdwood and other veterans of the Indian civil service bring scientific arguments to prove that the debasing narcotic is really a blessing to the Chinese. The Rajpoots and Sikhs of India are instanced as vigorous races who are addicted to the excessive use of opium; but its baleful effects are officially recognized in India in the laws prohibiting its sale; and when its destructive influence became recently apparent in British Burmah, energetic measures were taken by the Indian Government to uproot the evil. It is only in China that the British apologists, with no foreign scientists and no Chinese authority of any kind to support them, contend that the opium-habit is beneficial. It supplanted spirituous liquors in China. The Indian opium is much weaker in the narcotic alkaloids than the Turkish drug. Chinese opium is more harmless still. The Chinese do not eat opium nor drink laudanum or morphia, but smoke "chando," an extract obtained by long boiling the preparation sold in the bazaars, which is already greatly weakened in narcotic power by various admixtures. The narcotic principles can not be inhaled in the single puff of smoke that comes from the pipe which burns with a flash in the opium-pipe, because the alkaloids are not volatilizable. The resinous properties seem



to be all that passes into the lungs of the smoker. They are probably the cause of the efficacy of the smokable extract as a prophylactic against pulmonary and bronchial diseases. The Chinese missionaries who forbid opium-smoking, as well as juvenile marriages, to their converts, commit a double mistake, and rear an enfeebled class, who are decimated by consumption. Another inestimable property of opium is its value as a febrifuge. The Hindoos who eat the crude opium find it a perfect safeguard against malarial epidemics. Sir George Birdwood considers opium beneficial to the nutrition of vegetarians, as it prolongs the process of digestion. The Hindoos who do not take opium suffer from indigestion from the time they are weaned till the end of their lives. The reason is, that the human intestines are not as long proportionately as those of the graminivorous animals, and do not allow the complete digestion and assimilation of vegetable food. Smoking opium, as is the custom in China and the Indian Archipelago, he holds entirely harmless and indifferent, milder than tobacco, and the least alloyed of the pleasures of the senses, one which "seems to possess the true magic which spiritualizes sense." The residuum of the "chandoo" smoked by the rich is worked over with Indian hemp, tobacco, and nux vomica, and smoked again by the poorer classes. It is this "tye-chandoo," with its deleterious admixtures, which has given opium-smoking a bad name, although the mere vapor from even those substances can not be very harmful.

The Chinese themselves contribute no testimony to the English defenders of the opium-vice. To them it is neither a "dietetic corroborant" nor a prophylactic against consumption or malaria, but a national curse. Even the victims of opium pronounce it an enslaving vice. It brings all other vices in its train. The dissolute, the idle, and the vicious are all opium-smokers. The indulgence is so expensive that it ruins both rich and poor in fortune, as well as character and health. The debilitated, cachectic, soddan-witted wrecks of men, sunk in every vice, which are met with in appalling numbers in the cities of China, are believed by the Chinese to be the victims of opium. They trace poverty and immorality to this costly and demoralizing luxury with much greater unanimity than the people of America ascribe similar lapses of character and usefulness to alcohol. In Assam the cultivation of the poppy was promptly suppressed, and the consumption restricted by the Indian Government, because the vice became so general that it threatened to depopulate the province. The same firm course is being now taken in Burmah. The report of the commissioner in Burmah presents a very different estimate of the effects of opium-smoking from those of the defenders of the Tientsin treaty, who represent it as no more harmful than smoking willow-bark.

The papers now submitted for consideration present a painful picture of the demoralization, misery, and ruin produced among the Burmese by opium-smoking. These show that, among the Burmans, the habitual use of the drug saps the physical and mental energies, destroys the nerves, emaciates the body, predisposes to disease, induces indolent and filthy habits of life, destroys self-respect, is one of the most fertile sources of misery, destitution, and crime, fills the jails with men predisposed to dysentery and cholera, prevents the due extension of cultivation and the development of the land revenue, checks the natural growth of the population, and enfeebles the constitution of succeeding generations.

The Chinese Government have always been sincere and consistent in their efforts to suppress the opium-vice, but with intermittent energy, and through the agency of officials who are for the most part lax and shamefully corrupt. Opium was imported from India as a medicine a couple of centuries ago, but was first brought in considerable quantities and consumed as a luxury in the last quarter of the last century. The importers were the first British merchants who settled in China, agents of the East India Company at Canton, with whom a guild of native traders called the Hong merchants were permitted to hold dealings. As soon as the demoralizing effects of the drug were noticed, the authorities forbade its use, and in the year 1800 an imperial edict was issued entirely forbidding the import. The opium-trade grew in spite of the prohibition, and became established on a regular though still illicit footing. Bribes were taken from Dent, Jardine, and the other smugglers, and the opium was passed by the customs officials so systematically that the trade acquired a regular character. In 1820, when it had increased to 6,500 chests, the opium-ships removed their anchorage to Lintin, farther out of sight of the authorities. The evil was as yet insignificant, and confined to the wealthy and official classes; but in the next twenty years it acquired serious dimensions. For years the Government tried to enforce the law, but the opium importers armed their ships and landed their cargoes in defiance of the authorities. At length Lin Tsch-seu was sent to Canton in 1839 to put down the traffic. He besieged the factories at Lintin, seized the 20,000 chests of opium, valued at six million dollars, and threw it into the sea. Smuggling was resumed from Hong-Kong, and, when he beleaguered that place, war was declared. With all the humiliating terms and the heavy indemnities exacted from the Emperor in the treaty of 1842, he could not be induced to legalize the opium-traffic. Hong-Kong became British territory, and smuggling was carried on in Chinese vessels flying the British flag. An arrest of pirates on such a vessel was the ground of the second opium war, by which the treaty of Tientsin, legalizing the trade, was extorted in 1858. In 1869 negotiations were commenced for a revision, releasing China from the obligation to permit the traffic. A convention, authorizing a slight increase in the import duty, was signed

by Sir Rutherford Alcock in 1871, but was rejected in London. The Chefoo convention, concluded between Sir Thomas Wade and Li-Hung-Chang in 1876, promised, in return for the opening of the four new treaty ports, that opium imports should remain in bond until all dues were paid. As this would have permitted China to restrict the traffic by increasing the local dues, the agreement was not ratified by the British Government.

The efforts of the Chinese authorities to suppress the native cultivation of the poppy have been as fitful and ineffectual as those directed against the smugglers. The task is much more formidable than it would be to check the imports if their hands were freed; but considerable progress has been made of late years. Up to 1848 the cultivation was restrained with tolerable success. Subsequently, and particularly after the Tientsin treaty, the laws fell into desuetude. The policy was actually contemplated of encouraging the native cultivation until the Indian drug was driven from the market, and then crushing out the home production. The cultivation was probably extending in Western China and Manchuria, but of late years honest and energetic administrators like Tso, Shen, Pao-Chin, Tseng, and Yien have cleared large districts of the plant. Tsu Tsung-tang has reported that the poppy has been banished from the northwest. In like manner more frequent attempts have been made to enforce the laws against consumption, and thousands of shops have been closed within two or three years. But if a habit so prevalent, and an interest on which so many depend for livelihood, could be suddenly suppressed in any country, it would be most difficult in that immense, loosely-jointed empire, where central government is only a fiction, where the provincial governors and chief officials of the empire follow independent policies in the present interregnum, where they are glad if they can gather the taxes without driving the people to revolt, and where the administrative machinery is very imperfect and the officers ill-paid and scandalously venal.

The abolition of the Chinese opium-trade would entail serious difficulties in the government of India. There remains too little now of the enormous revenue drained from the indigent population of India by barbarous taxes discarded in all free countries, after the rapacious hierarchy of officials and the great garrison of soldiers by which British rule is maintained have been provided for, to return any satisfactory equivalent in public improvements of which the need is crying, and the schemes already matured, even with the opium revenue, which amounts to 17 or 18 per cent of the total. This forced contribution from China has increased from \$10,000,000 in 1848-'44 to \$42,000,000 in 1880-'81. It has supplied \$672,000,000 of net revenue in the last twenty years. The extension of opium-culture in China has not caused the importations to decline; the

aggregate net revenue of the decade 1871-'81 has exceeded that of the preceding decade by about \$60,000,000. The Chinese Government also raises a revenue from the import duty, which is fixed by the treaty legalizing the trade, and from internal transit dues, which some estimate at \$7,500,000 a year.

OREGON. The State officers chosen at the election on the first Monday in June, and inaugurated on September 13th, were Z. F. Moody, Governor; R. P. Earhart, Secretary of State; Edward Hirsch, Treasurer; E. B. McElroy, Superintendent of Public Instruction; State Printer, W. H. Byars; Supreme Court Judge, W. P. Lord. The other Judges of the Supreme Court are Edward B. Watson and John B. Waldo; State Librarian, S. H. Condon.

FINANCES.—The receipts of the State Treasury were as follows:

From the four-mill tax, 1881.....	\$198,982 61
From the four-mill tax, 1882.....	287,030 91
From the earnings of the Penitentiary.....	11,054 25
From delinquent taxes.....	1,683 79
From private insane.....	2,716 07
From sale of stamps.....	4,651 19
From sale of books.....	846 15
Miscellaneous sources.....	803 50
This, with balance on hand September 1, 1880....	57,794 26

Amounts to a total of..... \$510,018 18

The current expenses during the fiscal years 1881 and 1882 amount to about \$400,000, thus leaving a balance of \$110,000 in the Treasury.

The general bonded indebtedness of the State includes the soldiers' bounty bonds, the soldiers' relief bonds, the bonded debt arising out of the Indian difficulties of 1878, known as the Umatilla Indian war, and the bonded debt created by the act approved October 25, 1880, to complete the payment of the Modoc war bonds.

The soldiers' bounty bonds and soldiers' relief bonds are in the same condition they were at the close of the fiscal year 1880, except that the time when the State will be entitled to redeem them, in accordance with the terms upon which they were issued, is so much nearer at hand, though it continues two years yet. The requisite funds have for a long time been in the Treasury, with which to pay them off, but the holders could not be compelled to receive payment, and, as it appears, preferred to retain them as an investment.

The bonded debt arising out of the Umatilla Indian war is yet outstanding, except so far as it has been affected under the provisions of said act approved October 25, 1880, entitled "An act to refund the war debt and maintain the public credit, and appropriate money and levy a tax therefor."

At the last-mentioned date there was outstanding a bonded indebtedness known as "the Modoc war bonds," which amounted to \$132,858.72, with certain accrued interest thereon. By the provisions of said last-mentioned act the State Treasurer was authorized to sell the bonds of the State of Oregon to such an amount as, with the surplus moneys not otherwise appropriated, which had or might accrue from the



three-mill tax levied pursuant to an act to provide for a tax to defray the current expenses of the State, and to pay the indebtedness thereof, approved October 20, 1876, would realize enough money to pay in full the said Modoc war bonds, with the accrued interest. And for the purpose of paying the principal and interest on said Umatilla Indian war bonds, and the principal and interest upon the bonds of the State of Oregon so to be sold, a one-half mill tax upon the dollar was thereby levied.

In pursuance of said act of October 25, 1880, said Treasurer did sell one hundred and twenty bonds of the State of Oregon, each being for the sum of \$500, from the proceeds of which, with the surplus moneys accrued from said three-mill tax, he has redeemed the said Modoc war bonds.

There have been realized the proceeds of one levy of the half-mill tax, which amounted to \$29,628; and which has been applied upon the principal and interest of the said indebtedness, as in and by said act provided. The portions thereof unliquidated are respectively the sums following: Upon the Umatilla Indian war bonds, \$28,171; upon the bonds issued under the act of October 25, 1880, \$60,000. A continuation of this tax four years longer will more than pay off the entire amount. This indebtedness arose out of claims assumed by the State.

This is all of the general bonded indebtedness of the State, and if the Umatilla war claims and other claims referred to are allowed at any reasonable amount against the United States, they, together with the Modoc war claims already allowed, will not only pay off all the indebtedness arising out of those claims, but will bring into the State Treasury a surplus of several thousand dollars.

There is a bonded debt payable to the Willamette Falls Canal and Locks Company, or its assigns, out of the fund arising from the 5 per cent of the net proceeds of the sales of the public lands in the State, and the fund arising out of the sale of the 500,000 acres of land donated to the State for the purposes of internal improvements.

The original amount of these bonds was \$200,000. They bore interest at the rate of 7 per cent per annum. The 500,000 acre grant has all been sold, excepting 40,520 acres, and all of the amount sold has been deeded away, excepting 37,617.21 acres, two thirds of the purchase price of which has not been paid.

The cash sums arising upon the sale of said lands, except the portion thereof consumed in expenses attending the management of the grant, have been applied in payment of said lock bonds, which has reduced the same to the sum of \$68,000, and the Treasurer has sufficient money on hand to pay off about \$30,000 more of them.

There will probably be left of the proceeds of the said grant, after the lock bonds are redeemed \$56,000, besides the 40,520 acres of

land. Whatever is left of this grant belongs, it is presumed, to the common-school fund.

There is another special indebtedness known as the road warrants. They were made payable generally out of the swamp-land fund. They amounted, two years ago, to \$133,604. During the last two years a portion of them, amounting to about \$14,000 of principal and about \$5,500 in interest, has been taken up in payment of the 20 per cent payable on the purchase of swamp-lands, under the former act providing for the selection and sale of the swamp and overflowed lands belonging to the State of Oregon.

The balance due upon these warrants is but a small sum compared with the amount and value of the swamp and overflowed lands the State is entitled to under the act of Congress of March 12, 1860; yet it will be likely to drag along until more of them, claimed by the State as swamp and overflowed lands, are certified to be such by the department at Washington having the matter in charge.

**PUBLIC INSTITUTIONS.**—An act of 1880 provided for the construction of an Insane Asylum building. This structure, when completed and furnished, will have cost, it is estimated, not less than \$175,000. It was ready for inmates at the close of the year.

The last Legislative Assembly organized the School for Deaf Mutes by providing for a board of directors to have the charge and management thereof. The plan has operated well, and relieved the Board of Education of a great annoyance.

The insane and idiotic, since the death of Dr. J. C. Hawthorne, which occurred about February, 1881, have been kept, under the contract made between him and the State, by Mrs. Rachel Hawthorne, widow of the deceased, and Dr. S. E. Josephi, administratrix and administrator of his estate. The whole number in charge of said representatives is 315, of whom 221 are males and 94 females.

The number of convicts in the State Penitentiary on August 31st was 178.

The attendance during the year 1880-'81 in the collegiate department of the State University, according to the report of the president, was as follows: Highest number, 112; 48 women and 64 men. Lowest number, 55; 31 women and 24 men. Average for the year, women, 39½; men, 49; total average, 88½.

Highest number of free students, 60; 19 women and 41 men. Lowest number of free students, 40; 17 women and 23 men. Average for the year, women, 18; men, 32; total average, 50.

Highest number of pay students, 52; 28 women and 24 men. Lowest number of pay students, 25; 14 women and 11 men. Average for the year, women, 21; men, 18; total average, 39.

In the preparatory department the attendance was as follows: Highest number during the year, 64; 34 girls and 30 boys. Lowest

number, 31; 17 girls and 14 boys. Average for the year, girls, 25½; boys, 22; total average, 47½.

At commencement a class of seven persons was graduated, one woman and six men, four of them in the classical course and three in the scientific one.

**LANDS GRANTED TO THE STATE.**—Reference has already been made to the 500,000 acres donated for internal improvements.

The grant of ten sections of land, for the completion of public buildings, has been fully realized.

The grant of the salt-springs lapsed long ago, and no benefit will probably ever be realized therefrom.

The seventy-two sections set apart and reserved for a State University have been selected, and about 29,000 acres thereof sold, leaving about 17,000 acres unsold.

The 90,000 acres of land granted under the act of July 2, 1882, for an Agricultural College, have been selected, and about 26,000 acres thereof sold. The price at which they are required to be sold by the terms of the grant, \$2.50 an acre, renders their sale slow.

The sixteenth and thirty-sixth sections in each township, granted to the State for the use of schools, have been and are being sold from time to time, as the public surveys are extended. The full benefits of this grant will not be realized until all the public lands in the State are surveyed.

The several funds arising from the sales of the lands included in the said grants amount to the following sums respectively:

The University fund, principal.....	\$62,000
The Agricultural College fund, principal.....	65,000
The common-school fund, principal.....	655,000

The investment of these funds, under the present rate of interest, has become very difficult.

"I think it absolutely necessary," says Governor Thayer, "to lower the rate specified in the present law from 10 per cent to 9 per cent or lower. I doubt whether half of the amount on hand will be called for during the next year unless that is done."

Referring to the swamp-land grant, the Governor, in his message to the Legislature, says:

At the commencement of my term of office there had only been approved, by the Surveyor-General, 43,653.94 acres. During the time of its continuance he has approved 443,789.36 acres, nearly all of which have been selected, and the proof required by the mode aforesaid furnished. Besides other selections have been and are being made, which, when completed, will make the area of acres at least a half a million, from which the State should realize nearly that number of dollars.

There should be remaining in that fund, after the road warrants are paid off, fully \$300,000.

This fund, like the 500,000 acre grant, has been unkindly dealt with. It has been rudely invaded, and a great portion of its substance purloined. Some portion of it may have been applied to useful purposes, but it would be very small when compared with the benefits that should be received by the State. The

appropriations from it for the building of certain roads was somewhat after the manner of the disposal of the various grants by the United States to the State, for the building of roads from and to certain points. Generally they went to enrich private parties.

But the remnant may still be preserved and rendered highly useful. Ten per cent of the swamp-land fund is pledged by the laws of the State to the use of the common schools. Another portion should be applied to the benefit of the State University, which will enable an institution that should be the pride of Oregon to gain a firm financial footing. Had such a policy been pursued a few years ago we should not have witnessed the humiliating spectacle of the prevention of a forced sale of its building only through the kindly intervention of a non-resident of the State. An institution that sheds its light and luster far and wide becoming a mendicant for foreign aid is not a pleasing subject of contemplation.

**SALMON.**—On the regulation of the salmon-fishery, the Governor says:

Nature has bountifully supplied the Columbia River with salmon, a very excellent quality of fish, which, if preserved, will afford to the people of the State and adjoining Territories a delicate and substantial article of food for all future time. The State has full control over the subject within its limits. That authority has never been delegated. It has complete power to regulate its fisheries.

By proper legislation on the part of the State, and of Washington Territory, the salmon of the Columbia River could be preserved and rendered a lasting benefit to the people of both sections of the country. This can be done by limiting the catch during the spawning-season. It may require the arbitrary exercise of authority, for no other kind will check the greed and rapacity of a portion of mankind—the class that will prosecute any business as long as it can be rendered profitable, regardless of the importance of the consequences that are certain to follow.

One of two modes should be adopted. Either shorten the period in which salmon are allowed to be taken during the season, and regulate the kind and character of the appliances to be employed in taking them, so as to catch only the larger-sized fish; or limit the catch of a season to a specified number. Either mode may require the appointment of an officer invested with authority to enforce the provisions of the regulation, but the exigency of the case will justify it. Some rigorous measure must be adopted to prevent the extirpation of those valuable fish from the waters of the Columbia River.

**STATISTICS.**—The following statistics are for the year 1881-'82: Acres of land assessed, 5,201,654; value, \$28,280,847; value of town-lots, \$9,727,988; value of improvements, \$9,993,906; merchandise and implements, \$11,114,159; moneys, notes, and accounts, \$15,432,444; household furniture, carriages, etc., \$2,824,277; horses and mules, 114,024; value, \$4,831,352; cattle, 269,412; value, \$2,771,040; sheep, 854,750; value, \$1,401,837; swine, 85,218; value, \$193,816; gross value of all property, \$86,531,716; indebtedness, \$22,300,912; exemptions, \$4,973,058; total taxable property, \$59,257,746; State tax, \$325,917.38; school-children, 61,641.

**LEGISLATURE.**—The Legislature met on the 11th of September, and adjourned on the 21st of October. The following are among the acts passed:

An act to establish a paid fire department for the city of Portland.

An act to create the county of Crook, and



to fix the salaries of the county judge and treasurer thereof.

An act making provisions for the incorporation of cemetery associations.

An act for the protection of fish and game.

An act to create the county of Klamath, and fix the salaries of county judge and treasurer.

An act to incorporate the city of Philomath.

An act to change the time of meeting of the Legislature of the State of Oregon.

An act to authorize the Governor of the State to contract for keeping the insane and idiotic.

An act to define the boundaries of Coos and Douglas Counties.

An act to provide for the erection of a fish-way or ladder at the falls of the Willamette River, and to appropriate money therefor.

An act redistricting the State into judicial districts, and to provide for time and place of holding the Supreme, Circuit, and County Courts, etc.

An act to protect the ring-neck Mongolian pheasant in the State of Oregon.

An act to protect laborers in timber and logging camps.

An act providing for the establishing of State Normal Schools.

The most important provision of the law regulating the salmon-fishery in the Columbia River is one prohibiting fishing on the bar or in its immediate vicinity. The bill provides that it shall be unlawful to fish with gill-nets, of any description whatsoever, on or in the vicinity of the Columbia River bar. Hereafter it will be unlawful to take salmon in the Columbia River or its tributaries during March, August, and September, and during the "close times" in April, May, June, and July—such close times to be between six o'clock in the afternoon on Saturday and six o'clock on Sunday. The size of mesh for gill-nets is four and one eighth inches square. It is also made unlawful to put sawdust and mill-refuse into the Columbia River or its tributaries. Severe penalties are prescribed for violation of these various provisions.

Both branches of the Legislature ratified the proposed woman's suffrage amendment to the Constitution. The vote in its favor was unexpectedly large, it being 21 yeas to 7 nays in the Senate, and 47 yeas to 9 nays in the House of Representatives. The resolution had previously passed the Legislature of 1880. It now goes to the people.

Hereafter the Legislature will meet, and the terms of office of the State officers will end, on the 1st of January. Governor Moody and his colleagues will hold office until January 1, 1887. A heated contest over the United States senatorship continued through the entire session. The Republicans were divided, a majority of them supporting obstinately ex-Senator Mitchell. On the seventy-fifth ballot, on the last day of the session, just before adjournment, Joseph N. Dolph, of Portland, Republican, was

chosen, receiving 51 votes, against 36 for all others.

**PARTY CONVENTIONS.**—The Democratic State Convention met in Portland on the 5th of April, and nominated the following ticket: Congressman, William D. Fenton, of Yamhill; Governor, Joseph S. Smith, of Portland; Secretary of State, J. K. Weatherford, of Linn; Treasurer, Hyman Abraham, of Douglas; Superintendent of Instruction, W. L. Worthington, of Wasco; State Printer, Wilbur Cornell, of Marion; Supreme Judge, E. D. Shattuck, of Portland.

The platform adopted contained the following among other resolutions:

The Democratic party of the State of Oregon, in convention assembled, cognizant of the important consequences depending upon its deliberations, and affirming the principles of popular liberty and rights laid down by the founders of this Government, do declare as follows:

1. That we favor honesty, efficiency, and economy in every department of the Government, both State and Federal.

2. That we favor the equal protection of the rights of labor and capital under just laws.

3. That while we recognize and respect the legal rights of railroad enterprises, we demand that our Legislatures, State and Federal, enact such laws regulating the same, as may be necessary to prevent unjust discrimination and oppression of the people.

4. That we denounce the present tariff system as class legislation favorable to the few and oppressive to the many; and therefore demand an immediate revision thereof, a reduction of all import duties to a strict revenue standard; and that the free list be so enlarged as to include all articles of mechanical, agricultural, and domestic use among the people, as far as the needed revenues of the Government will permit.

5. That the President's veto of the Chinese Immigration Bill is a public misfortune. It sets the degrading mark of competition with coolies of China upon the labor of the working-men of America, and it treats with contemptuous disregard the unanimous protests and appeals of the entire Pacific coast. In behalf of the people of Oregon we disapprove and condemn it, and declare it to be the duty of every citizen, regardless of party, to express his disapproval with his vote as well as with his voice. . . .

8. That we are in favor of a repeal of the navigation laws, and the removal of the duties on all materials that enter into the construction of vessels, so that American produce can be carried in American bottoms, and the American people be able to enter into competition for the carrying-trade of the world.

The Republican State Convention met in Portland on the 20th of April, and nominated the following ticket: Congressman, M. C. George; Governor, Z. F. Moody; Secretary of State, R. P. Earhart; Treasurer, Edward Hirsch; Superintendent of Public Instruction, E. B. McElroy; State Printer, W. H. Byars; Judge of Supreme Court, W. P. Lord. The platform adopted contained the following, among other resolutions:

The Republican party of Oregon, in convention assembled, do make and affirm the following declaration of our political principles:

- Resolved*, 1. That we favor honest, efficient, and economic administration of every department of the Government.

2. That we favor the equal protection of the rights of labor and capital.

3. We are in favor of regulating the salaries of

county officers, so that they shall receive such compensations as are commensurate with their services.

4. That we regard the free-school system of our State as the special care and pride of the Republican party.

5. That it is the policy of the Republican party to foster and encourage the development of our State by the construction of railways which will place us in direct communication with our sister States.

6. That we hold all corporations to be strictly responsible to their liabilities under the law, and recognize the right of the Legislature to enact all reasonable limitations on corporate powers.

8. That we favor the enactment of a law by Congress, restoring to settlers the right to homestead and pre-empt in all cases where, by abandonment of entries and filing, they have hitherto not had the full benefit of these acts.

9. That the rapidly increasing manufacturing and wool-raising interests of the State demand the continued fostering care of the General Government.

10. That the reciprocity treaty with the Sandwich Islands is an imposition upon the Government and the people, and should be speedily abrogated.

We here earnestly declare it to be our belief that Chinese immigration to the United States should be restricted, and we demand that our representatives in Congress shall persist in advocating the enactment of a law that will effectively accomplish this result.

**ELECTION RETURNS.**—The election in June resulted in the choice of the Republican ticket. The following is the vote :

OFFICERS.	Republicans.	Democrats.	Majority.
Congressman.....	22,517	19,152	3,365
Governor.....	21,481	20,069	1,412
Secretary of State...	22,052	19,536	2,516
Treasurer.....	21,290	18,891	2,399
Sup't Public Instr'n.	22,163	19,120	3,043
State Printer.....	21,999	19,561	2,436
Judge.....	21,484	20,033	1,451

The Legislature chosen at this election consists of 16 Republicans and 14 Democrats in the Senate, and 37 Republicans, 21 Democrats, and two Independents in the House.

**OSTRICH-FARMING IN THE UNITED STATES.** This is a new branch of industry proposed for introduction, with promises of rich returns. In May, 1881, it appears that twenty-two South-African ostriches were shipped to this country, by way of Buenos Ayres, South America. The birds survived the long sea-voyage, and were placed in the Central Park inclosure, New York. As ostrich-farming has been a very profitable industry in South Africa since 1867, more than \$6,500,000 worth of feathers being exported annually, it is urged that American farmers should turn their attention to this new and alluring venture. The business is successful in Buenos Ayres, where the birds flourish and produce a superior quality of feathers. It is claimed that the United States, particularly the Southern, Southwestern, and Pacific States, are admirably adapted to the raising of these birds, who need only an inclosed paddock, or grass-field, with sufficient pasturage to sustain them. They thrive, it is said, on clover, grass, weeds, grain of any kind, acorns, potatoes, beets, turnips, onions, car-

rots, salt, small pebbles, and chopped bones. From what appear to be reliable statements, it is asserted that the product of feathers from one bird annually is worth \$60, wholesale, in London. Where the pasturage is very good, the yield of one plucking has reached \$150, which, however, is much in excess of what is ordinarily to be expected. There being two pluckings a year, it is deemed reasonable to expect at least \$120 worth of feathers from each bird annually in the United States.

An ostrich of two years old costs about \$375; deducting from the yield a percentage for expenses and risks of mortality, the profit is still as much as 15 to 20 per cent on the investment. Any farmer of stock can place (say) fifty birds on his land; and as the trouble of caring for them is not great, it is claimed as certain that the returns will be large. The cost of four-year-old birds is estimated at \$1,200 per pair, and for breeders \$1,750 per pair. By the process of incubation it is expected that sixty chicks will be annually reared from a pair of breeders. The first plucking of feathers, at the end of nine months, is worth \$5 or \$6 per bird, and every six months thereafter, the yield is from \$28 to \$120 per plucking, according to the age of the bird. Naturally, the birds are timid, but they are readily domesticated, and become on the farm as tame as chickens, ducks, or geese. In the management of them, it is best that they be collected and counted about once a week. Every month they should be brought into a small inclosure, when each bird should be examined, and the ripe feathers plucked. The process of displucking them is quite simple. They are put in a *corral*, or small pen, so confined that they can not exercise their propensity for kicking, and while two men hold the bird, a third proceeds to pluck the feathers. A still safer and more satisfactory way is to put the bird in a box or stall made for the purpose. When the birds are breeding, each pair should have a small inclosure to themselves, say seventy yards square, and a little grain daily.

As a rule, each wing of an ostrich produces twenty-four to twenty-six long feathers. In the male bird they are all pure white, except two, which are black and white, and usually termed "natural fancy feathers." In the female the long wing-feathers are perfectly white and gray. In addition, the male bird produces at each plucking three ounces of smaller black feathers; the small feathers of the female are gray and drab in color. From the tail are plucked forty ounces of feathers, those from the male being white, and those from the female white, and white and gray.

If the judgment of those best acquainted with the subject be sound and correct, ostrich-farming promises to become an active and profitable pursuit. Further experiment will test the question fully.



## P

**PARAGUAY** (REPÚBLICA DEL PARAGUAY). Provisional President, General B. Caballero; Secretary of the Interior, Colonel Duarte; Secretary of Foreign Affairs, J. S. Decoud; Secretary of the Treasury, J. A. Jara; Secretary of Justice and Public Worship, J. A. Bazarás; Secretary of War, Colonel Duarte.

The republic covers an area of 238,290 kilometres square, or 91,650 square miles.

**POPULATION.**—The last census, that of 1876, fixes the population at 293,844 persons. Since the war of 1865-70, the number of females greatly predominates. The number of foreigners is named at about 7,000; of these more than one third are Italians. Next to them, the most numerous are Brazilians, Argentines, Spaniards, and Portuguese. Since 1881 the number of Germans has rapidly increased, there being about 350 in the country. The capital, Asuncion, contains 19,463 inhabitants.

**FINANCES.**—The chief source of revenue is derived from the duties on imports, which in 1881 furnished an income of \$412,740, silver. The export duty was abolished in 1877, but, since then, that on hides and Paraguay tea (*yerba maté*) has been re-established. The budget estimate for 1882 fixed the public expenditure at \$313,429, of which the Department of the Interior was expected to absorb \$134,583; Foreign Affairs, \$10,440; Treasury Department, \$42,948; Justice and Public Worship, \$60,564; and War and Navy, \$64,894.

**PUBLIC DEBT.**—Under the provisions of the treaty of peace with the nationalities that composed the triple alliance, Paraguay assumed to pay the expense of the war, as well as an indemnity for the destruction wrought by the invading hosts of Lopez on the borders of Brazil and the Argentine Republic. The amount of the indemnity of the war has never been stipulated, but the inhabitants that had been sufferers in consequence of the invasion have drawn up their account establishing a joint claim of several million dollars. This bill Paraguay has formally acknowledged. The internal debt has been reduced by the sale of national property and of the railroad, and further through the working of a sinking fund created by 15 per cent extra duties levied, so that it now amounts to a mere trifle. On the other hand, the foreign indebtedness increases steadily, through accumulation of unpaid coupons.

**ARMY.**—Every able-bodied citizen is held to serve his country; yet, for economy's sake, the number of soldiers actually enrolled and doing service does not exceed 500 men, 350 of whom are infantry and 150 cavalry. Part of this little force is garrisoned at Asuncion, the remainder being scattered along the frontier. In time of war the National Guard is called under

arms. The entire country is subdivided into 70 departments, each of them under a chief of police.

**COMMERCE.**—The imports amounted in 1880 to \$1,030,000, the exports to \$1,163,000, the duties collected thereon amounting to \$320,000, while in 1881 the imports reached \$1,278,000, and the exports \$1,812,000, \$430,000 being the customs revenue derived therefrom.

The chief articles of import in 1881 were the following: Cotton goods, \$263,000; wines, \$112,500; flour, \$40,800; rice, 25,100; malt-liquors, \$24,400; bagging, \$18,800; exports in the same year: Paraguay tea, 5,000 tons; tobacco, 3,600 tons; cigars, 2,000,000; oranges, 24,000,000, the balance being made up from hides, tanning-bark, starch, essence of orange-flowers (2,500 kilogrammes), woods, brandy, Indian corn, and leather.

There is no railroad in operation except the Asuncion and Paraguay line, of 45 miles in length.

The postal service only forwarded 67,335 letters in 1880, of which 20,796 were inland; and in 1881 the amount had nearly doubled, 130,113 being forwarded, of which 34,117 were inland. The receipts were \$1,872 in 1880, and \$2,227 in 1881.

The only line of telegraph is the one running parallel with the railroad.

**PARSONS, THEOPHILUS**, died January 26th, at his home in Cambridge, Mass. He was descended from a long line of men eminent in Massachusetts since its colonization, and was the son of Chief-Justice Theophilus Parsons, of that State. He was born at Newburyport, in 1797, when that town was a flourishing commercial port. After graduating at Harvard in 1816, he spent a year in Europe, and then entered upon the study of the law in Boston, in the office of Judge William Prescott, father of the eminent historian. He first practiced his profession in Taunton, and afterward in Boston. At this time he became a frequent contributor to "The North American Review" and lesser periodicals, among which were the "Club Room," edited by William H. Prescott; Walsh's "American Review," published in Philadelphia; Merrick's "Free Press," and the "New England Galaxy," of which he was for some time associate editor. He also founded and edited the "United States Literary Gazette," which had but a brief existence. Among Professor Parsons's earlier literary productions, were a volume of "Sunday Lessons," setting forth the Swedenborgian doctrines, and one of essays treating of such subjects as "Providence," "Life," and "Religion." It is, however, as a writer upon legal subjects that Professor Parsons is best known. He was appointed to the Dane Professorship of Law at Harvard

in 1848, which position he held at the time of his death. Five years after his appointment he published his first important work, his well-known and authoritative "Treatise on the Law of Contracts." This was followed by "The Elements of Mercantile Law" a year afterward, and by "The Laws of Business for Business Men" in 1857. In 1859 he published his "Treatise on Maritime Law," and in 1863 his "Treatise on the Law of Promissory Notes and Bills of Exchange." The "Treatise on the Law of Partnership" was published in 1867, and that on "Marine Insurance and General Average" in 1868, and "The Political, Personal, and Property Rights of a Citizen of the United States" in 1875. Besides these, his chief works, Professor Parsons wrote on a variety of topics. One of his most interesting works is the biography of his father, Chief-Justice Parsons.

**PENNSYLVANIA. STATE GOVERNMENT.**—The State officers during the year were the following: Governor, Henry M. Hoyt, Republican; Lieutenant-Governor, Charles W. Stone; Secretary of State, Matthew S. Quay; Treasurer, S. M. Baily; Auditor-General, John A. Lemon; Secretary of Internal Affairs, Aaron K. Dunkel; Attorney-General, Henry W. Palmer; Adjutant-General, James W. Latta; Superintendent of Public Instruction, E. E. Higbee; Insurance Commissioner, J. M. Foster; Judiciary, Supreme Court, Chief-Justice George Sharswood; Justices, Ulysses Mercur, Isaac G. Gordon, Edward M. Paxson, Henry Green, John Trunkay, and James P. Sterrett.

#### FINANCES.

At the close of 1878 the State debt was ..... \$21,575,620 86  
At the close of 1882 the State debt was ..... 20,225,088 28

Reduction of debt in four years ..... \$1,650,537 58  
From this total of State debt is to be deducted  
assets in sinking fund amounting to ..... 7,982,988 82

The net State indebtedness December 1,  
1882, is ..... \$12,282,099 46

In 1879 there was refunded an outstanding debt of \$2,000,000, bearing 6 per cent interest, by a loan of a like amount, bearing 4 per cent interest, the premiums on which were \$80,002.83.

In 1882 State loans of over \$10,000,000, bearing in the main 6 per cent interest, were refunded by loans of \$9,450,000, bearing interest at 3, 3½, and 4 per cent per annum. The premium on these loans amounted to \$449,562.

The result of these operations has been to reduce the annual interest which the State pays upon its interest-bearing debt from \$1,233,623.72 in 1878, to \$874,460 in 1882, an annual saving of \$359,163.72 on this account.

There is at present in the sinking fund \$2,077,073.90 cash. As none of the State loans are at present reimbursable, the Treasurer has no lawful authority to apply this fund to the reduction of the debt, except by going into the market and buying the bonds of the State at a premium. These bonds, at market rates, now bear premiums about as follow :

The 3½ per cents are selling at ..... \$106  
The 4 per cents are selling at ..... 117  
The 5 per cents are selling at ..... 119

Before assuming such responsibility, the Treasurer is justified in awaiting a legislative command.

The sources of revenue to the State for the year were as follow :

Lands .....	\$5,605 47
Tax on corporation stock and limited partnerships.....	1,675,888 80
Tax on gross receipts.....	658,670 91
Tax on coal companies.....	90,708 86
Tax on bank-stock.....	850,171 59
Tax on net earnings or income.....	74,265 15
Tax on gross premiums.....	62,057 86
Tax on loans.....	636,790 88
Tax on personal property.....	487,778 61
Tax on writs, wills, deeds, etc.....	109,104 23
Tax on collateral inheritances.....	476,552 02
Tax on sale of fertilizers.....	8,780 00
Foreign insurance companies.....	224,989 10
Tavern licenses.....	498,862 82
Retailers' licenses.....	805,984 92
Eating-house licenses.....	79,682 26
Brewers' licenses.....	9,188 42
Billiard licenses.....	16,584 60
Brokers' licenses.....	9,886 84
Auctioneers' licenses.....	6,538 04
Liquor licenses.....	86,076 50
Peddlers' licenses.....	1,766 10
Patent-medicine licenses.....	4,508 20
Theatre, circus, etc., licenses.....	6,040 30
Bonus on charters.....	150,991 91
Office license-fees.....	10,480 99
Accrued interest.....	50,336 39
Penalties.....	578 17
Pamphlet laws.....	275 41
Notaries public commissions.....	10,275 00
Alleghany Valley Railroad Company.....	499,069 41
United States Government.....	94,561 15
Commutation of tonnage tax.....	460,000 00
Annuity for right of way.....	10,000 00
Escheats.....	8,078 87
Fees of public officers.....	50,472 99
Refunded cash.....	697 57
Dividends on stock owned by the Commonwealth.....	80 00
Conscience-money.....	16 00
Miscellaneous.....	1,551 27
<b>Total.....</b>	<b>\$7,068,529 66</b>

The total expenditures for the same time were \$5,024,766.41.

Of this aggregate, more than \$4,000,000 were derived from taxes on corporations. The only item which, in any true sense, is a direct tax on the people, is that of \$437,776.64, "tax on personal property." This tax is derived from money at interest, watches, and carriages. If it is desirable to retain the taxes on the national banks, which yield the State nearly \$350,000 annually, this "tax on personal property" can not be abolished, as the acts of Congress creating the national banks forbid their being subject to any greater tax than is imposed upon "other moneyed capital" in the State. There is no tax for State purposes on real estate. Except certain corporate bonds and stocks, and the road-beds and shops and mechanical devices of railroads, all *property* in the State is liable to local taxes, for city, county, school, poor, and road purposes. The laws for their levy and collection are substantially uniform, and sufficiently understood by the people.

For educational, penal, and charitable purposes, there were appropriated by the Legis-



lature in 1881, for annual expenditure, sums as follow :

Educational.....	\$1,463,764 15
Penal.....	367,198 75
Charitable.....	681,664 85
Total.....	\$2,512,617 25

EDUCATION.—The annual expenditures of all kinds for public schools were \$8,263,244.54. The value of school-property is \$28,346,560.

Appropriation by the State to the common schools.....	\$1,000,000 00
Normal schools.....	82,000 00
Soldiers' Orphan Schools.....	381,764 15
Total.....	\$1,463,764 15

The number of school-directors is 15,000; there are nearly 22,000 teachers, and the number of pupils enrolled is 950,000. To these extensive agencies may be added the numerous academies, colleges, and universities which are supported by voluntary contributions and private patronage. "I concur," says the Governor, "in the recommendation of the superintendent, that the minimum time during which the public schools should be open each year should be enlarged to six months; as also that the appropriation made by the State to each district should be distributed on the basis of the average number of children in attendance, rather than on the basis of taxables in the respective districts, as is now the law. The State Normal Schools will doubtless be constrained to present their condition and their claims to the Legislature. Some of them are badly involved in debt, and others, which have contracted no serious indebtedness, are without adequate equipment."

The Soldiers' Orphans' Schools are now, by law, under the superintendency of the Department of Public Instruction. The reports show them in a healthy condition, physically, intellectually, and morally. There are now 2,963 children in these schools. By existing law it is provided that they shall be finally closed on June 1, 1885. It is estimated that at that date there will be on their rolls 1,770 children.

The number of school districts in the State is 2,215; number of schools, 19,183; graded schools, 7,812; school directors, 15,625; superintendents, 102; male teachers, 9,051; female teachers, 12,778; average salaries of male teachers per month, \$35.12; female teachers, \$28.89; average length of school terms in months, 6.99; number of pupils, 945,345; average number of pupils, 611,317; cost of tuition, \$4,863,717.91; cost of building, purchasing, and renting, \$1,329,232.03; cost of fuel, contingencies, and interest paid, \$2,058,294.64; State appropriation, \$1,000,000; estimated value of school-property, \$28,341,560. As compared with the preceding year, the increase in the number of districts is 7; schools, 348; grade schools, 555; decrease in number of male teachers, 308; increase in number of female teachers, 785; increase of salary of male teachers per month, \$1.46; decrease of salary of female teachers, 14 cents; increase of length

of school term in months, .11; increase in number of pupils, 13,596; increase in average number of pupils, 13,596; increase in cost of tuition, \$146,701.41; increase in cost of building, purchasing, and renting, \$22,220.90; increase in cost of fuel contingencies, debt and interest paid, \$59,617.26; increase in value of school-property, \$1,736,239. In Philadelphia there were 2,113 schools, 81 male teachers, and 2,032 female teachers. The average salary of male teachers was \$120.53 per month, and of female teachers \$39.90. The number of pupils at the close of the year was 102,185, and the average attendance 91,894.

PUBLIC INSTITUTIONS.—There are two penitentiaries in the State—one in Allegheny and one in Philadelphia. The Western Penitentiary has been in process of rebuilding for several years, at a cost of several hundred thousand dollars. The course of treatment pursued there is that known as the congregate system.

The Eastern Penitentiary has reached about its limit of cell capacity. It is conducted on the separate confinement or individual treatment system. It has not met with the uniform approval of those who claim to be specialists in this branch of political economy, and social science congresses occasionally assume to condemn its mode of dealing with its inmates. It has, for more than fifty years, held consistently to the statute creating it. "Much as the system has been controverted, I deem it just," says the Governor, "as one who has given some attention to this subject, to say that for convicts who have deliberately joined the criminal class—for those whose age or repeated conviction render them amenable to punitive rather than reformatory methods—and for those against whose violent passions or confirmed habits society can find no protection but in incarceration, the separate system affords the most complete opportunities of treatment, and yields the best attainable results."

There are two institutions in the State for the reform of juvenile offenders—the State Reform School at Morganza, Washington County, and the House of Refuge at Philadelphia. The latter is a private corporation, to which the State gives financial aid and official inspection, but in which it has no administrative control. It is fulfilling the purpose of its erection with substantial success.

The Reform School at Morganza was originally a local institution, but its property and its control are now in the hands of the State. The property consists of a valuable farm of several hundred acres, in a high state of cultivation, well-constructed brick buildings, containing family rooms, dormitories, and workshops, capable of accommodating about five hundred boys and girls.

The State has in operation five hospitals for the care of the insane—at Norristown, Harrisburg, Danville, Warren, and Dixmont. The latter is not strictly a State institution, but receives liberal aid from the State. In them

are accommodations for nearly four thousand patients. The buildings have cost several million dollars, and are constructed in view of the largest experience. In all of them, certain sums are required of the State for annual maintenance.

In 1879 the Legislature directed the erection of a State hospital for injured persons of the anthracite-coal region, for the counties of Schuylkill, Carbon, Northumberland, Columbia, and Dauphin. This institution is now completed. The buildings are well arranged, the site is an eligible one, and the purposes of the act seem likely to be successfully reached.

Beside these State Institutions, very liberal appropriations have been made in the interests of the defective classes in institutions not under State control. These institutions are the "Pennsylvania Working Home for Blind Men," the "Pennsylvania Institution for Instruction of Blind," both in Philadelphia; "Training-School for Feeble-Minded Children," at Media; "Pennsylvania Institution for Instruction of Deaf and Dumb," at Philadelphia; "Western Pennsylvania Institute for Instruction of Deaf and Dumb," at Pittsburgh. Some thousands of dollars were also appropriated to purely private hospitals, in which were no State patients, in the different cities of the State—Pittsburg, Williamsport, Wilkesbarre, Scranton, York, and Harrisburg.

**LIFE INSURANCE.**—The magnitude of this interest may be estimated by the fact that in the years 1880 and 1881 the regular life companies of the State and other States authorized to do business in Pennsylvania received premiums from their business in the State amounting to \$10,483,836. Of this sum, \$3,025,109 was received by companies of the State, and \$7,358,696 by companies of other States, upon which last-named sum a tax amounting to \$221,768.88 was paid into the State Treasury for the privilege of doing business in the Commonwealth.

During the same years companies organized under the laws of the State to insure lives upon the assessment plan, received, in the premiums and assessments, the sum of \$5,500,989, upon which no tax was paid to the State; and paid for death-claims the sum of \$2,959,302. The balance of \$2,541,687 was appropriated by these companies to agents, officers, and expenses. Most of these companies engaged, without warrant of law, in business of a purely speculative character, and entire communities were demoralized by their nefarious operations. The evil attained such magnitude that it was found necessary to institute legal proceedings for their suppression, which has been happily accomplished through the instrumentality of the proper authorities.

**GEOLOGICAL SURVEY.**—The Board of Commissioners of the Second Geological Survey make report of their work and their estimates for the future. The unfinished survey is mainly confined to the anthracite-coal region. Reasons

are assigned for the delay and increased cost of this portion of the work, and the letterpress and maps illustrating it. They say: "But such work can not be done within the time nor for the money named in our former estimate. It will require at least three more years and \$50,000. Whether the Legislature will be willing to expend that amount for the benefit of an interest the most important in the State—in fact, the most important of the kind in the known world, and which has contributed to the State Treasury, directly and indirectly, millions of dollars in taxation—is not for this board to say. If not, the work will be wound up as well as possible, leaving about two thirds of the anthracite region unsurveyed."

**NATIONAL GUARD.**—As now constituted, the National Guard is composed of a single division, three brigades, fifteen regiments, three companies of cavalry, three batteries of artillery, the battalion of State Fencibles, and two independent companies, aggregating 8,220 officers and enlisted men. They are distributed throughout the State in such numbers and in such localities as seemed likely best to subserve any duty to which they might be assigned. The Guard is well equipped, and armed in an approved manner. The mobility and efficiency of the whole command have been well attested, both in camp and in route, on more than one occasion. The quartermaster and commissary departments have been fully proved in their capacity to furnish prompt and economical supplies.

**POLITICAL.**—The campaign of the year was notable. Dissatisfaction with the party organization and management had for some time been growing among Republicans, and led in 1881 to the independent candidacy of Charles S. Wolfe for Treasurer, and to the formation of an organization opposed to the existing control of the party. These warnings were not heeded, but early in the year it became evident that the party managers, under the lead of Senator Cameron, had selected their ticket and arranged their programme in advance of the convention, which would meet only to register their will. There was no objection, on personal grounds, to the nominee selected for Governor. The objection of the Independents was against the system. The chief points of their creed were: the overthrow of "bossism," reform in the choice of delegates to State Conventions, civil-service reform, and the overthrow of the "spoils system." The action of the regular Republican Convention on these points, though advanced, was not satisfactory to them. After the two conventions had been held, efforts were made to secure union, but they proved unsuccessful. To the split in the Republican party was added the wise action of the Democratic Convention, whose nominee for Governor was taken as a fit representative of the reform sentiment of the time.

The Republican State Convention met in Harrisburg on the 10th of May, and nominated



the following ticket: For Governor, General James A. Beaver, of Centre County; Justice of the Supreme Court, William Henry Rawle, of Philadelphia; Secretary of Internal Affairs, John M. Greer, of Butler County; Lieutenant-Governor, William T. Davies, of Bradford County; Congressman-at-large, Thomas M. Marshall, of Alleghany County. The following, among other resolutions, were adopted:

*Resolved*, That as the sense of the great body of the Republican party of the State of Pennsylvania we declare:

1. That we unequivocally condemn the use of patronage to promote personal political ends, and require that all offices bestowed within the party shall be upon the sole basis of fitness.

2. That competent and faithful officers should not be removed except for cause.

3. That the non-elective minor offices should be filled in accordance with rules established by law.

4. That the ascertained popular will shall be faithfully carried out in State and National Conventions, and by those holding office by the favor of the party.

5. That we condemn compulsory assessments for political purposes and proscription for failure to respond either to such assessments or to requests for voluntary contributions, and that any policy of political proscription is unjust and calculated to disturb party harmony.

6. That public office constitutes a high trust to be administered solely for the people, whose interests must be paramount to those of persons and parties, and that it should be invariably conducted with the same efficiency, economy, and integrity as are expected in the execution of private trusts.

7. That the State ticket should be such as by the impartiality of its constitution and the high character and acknowledged fitness of its nominees will justly commend itself to the support of the united Republican party.

*Resolved*, That it is the duty of the Federal Government to adopt a policy which will result in observing good faith toward aborigines by keeping intruders out of the Indian Territory, by enacting laws protecting life and property on reservations, by prohibiting tribe removals, by educating all Indian children in manual-labor schools, and by giving lands in severalty, and eventually citizenship, to all self-supporting Indians who desire the same.

*Resolved*, That the administration of President Chester A. Arthur, commenced under such sad and trying circumstances, has proved to be wise, conciliatory, and efficient, and is entitled to the cordial support of every Republican.

*Resolved*, That under the administration of our worthy and able Governor, Henry M. Hoyt, the affairs of our State have been wisely, honestly, and economically administered, the interests of the taxpayers of the State been carefully guarded, and the administration is worthy of the confidence of every citizen.

*Resolved*, That the ticket nominated this day combines purity of personal character with eminent ability, is worthy of the hearty and undivided support of every true Republican, and for its election we hereby pledge our earnest efforts.

General James A. Beaver, of Centre County, the nominee for Governor, was born in Millers-town, Perry County, Pa., October 21, 1837. His father died when he was three years of age, and he was brought up by his grandfather, who lived in Mifflin County. He was graduated at Jefferson College when nineteen years of age, with honor, and then settled at Bellefonte, Centre County, and entered the legal profes-

sion. Upon the breaking out of the civil war, Beaver entered the service as captain of Company H, Second Pennsylvania Infantry, and served as such during the three months' campaign. He entered the three years' service as lieutenant-colonel of the Forty-fifth Pennsylvania Infantry. He resigned his command on September 4, 1862, to take command of the One Hundred and Forty-eighth Regiment recruited in Centre County. He was shot through the body at Chancellorsville, and his wound was supposed to be fatal, but he was sent to Harrisburg and recovered. Before rejoining his regiment he organized and sent to the field the emergency men from Camp Curtin who participated in the battle of Gettysburg. He distinguished himself at Auburn Hill and Bristow Station. At Cold Harbor he was wounded in the hip, and promoted to the command of his brigade. At Petersburg, while rallying his forces, he was struck in the side by a piece of shell and thus received a severe wound. He came North and remained until the battle of Ream's Station, on the Wilmington and Weldon Railroad, August 24, 1864, in which he lost a leg. The loss of his limb obliged him to retire from the service, and he returned to Bellefonte, and resumed the practice of law. In 1865 he married the daughter of his law preceptor and partner. He is the President of the Board of Trustees of the Agricultural College of Bellefonte, was a delegate to the Chicago Convention, and, after Oliver's defeat for United States Senator in 1881, was brought forward as a compromise candidate, but was not accepted by the Independents.

Mr. Marshall subsequently declined, and Marriot Brosius was substituted in his place.

The Greenback State Convention met in Harrisburg on the 18th of May, and made the following nominations: For Governor, Thomas A. Armstrong, of Pittsburg; Lieutenant-Governor, Mayor Powderly, of Scranton; Supreme Court Judge, J. Adam Eake, of Northumberland County; Secretary of Internal Affairs, J. Lowry Dewoody, of Venango County; Congressman-at-large, Robert K. Tomlinson, of Bucks County. The platform adopted contained the following resolutions:

*Resolved*, That we are against the monopoly of money by the national banking system, and are in favor of the Government issuing all currency and making it full legal tender.

2. We are against the monopoly of transportation and telegraphy, and declare that corporations, the creation of the State, be governed by the State in the interest of the people.

3. We are against the monopoly of the land, and demand the reservation of all public land, including the vast amount now forfeited by the great corporations, for actual settlers.

4. We are opposed to all monopolies, and are in favor of equal rights, equal burdens, equal benefits, and special privileges to none.

And whereas the right of labor to organize for discussion and enforcement of its rights in this State has been assailed by combined monopolies; therefore—

*Resolved*, 7. That this legal and constitutional right



shall be maintained, and that associated labor shall have all the rights and privileges permitted to associated capital.

An additional resolution was adopted declaring that all pay shall be upon a basis of eight hours constituting a day's labor.

The Independent Republicans assembled in State Convention in Philadelphia, on the 24th of May, and put forth a ticket consisting of the following names: For Governor, Senator John Stewart; Lieutenant-Governor, Levi Bird Duff, of Alleghany County; Secretary of Internal Affairs, Major G. W. Merriek, of Tioga; for Congressman-at-large, Colonel William McMichael; for Judge of Supreme Court, George Junkin.

The following is the platform adopted by the convention:

The Republicans of Pennsylvania who will not surrender their political rights, and who maintain the exercise of their own conscience and judgment concerning public affairs, having assembled in State convention, make the following declaration of principles and purposes:

1. We declare our attachment to the principles of the Republican party—freedom, wisdom, nationality, equal rights before the law, maintenance of the public faith, protection to home industry—and we demand the record which has been so nobly made shall be wisely and fearlessly perpetuated.

2. We declare the nomination and election of James A. Garfield to the presidency signified to us the triumph of true reform in the civil service, and enlarged liberty of action for the masses of the Republican party in the nomination of candidates and the conduct of their party affairs, and we deplore the overwhelming evidence presented to us in Pennsylvania that the calamity of his assassination has been followed by the overthrow of these reforms in the hands of his successor.

3. We denounce the system which makes "patronage" and "spoils" out of public offices; we denounce the practice giving them to political managers for use in advancing personal and political ends; we denounce the removal of faithful and competent officers in the absence of public reason; we denounce the practice of levying assessments and demanding contributions for party use from public officials; we denounce severally and collectively the evils and corruptions which accompany the conduct of the Government as the "spoils" system, and which are inseparable from such method of administration; and we denounce the system of "boss rule" and "machine" control, which, when tamely endured, makes leaders autocrats, and reduces the mass of citizenship into political bondage.

4. We declare our purpose to take up the work which fell when Garfield fell. We demand, in place of the "spoils system," the reformation of the civil service by law, so that appointive places therein may be freely open to all fit and industrious citizens, and removals therefrom shall be only for good and sufficient public cause. We demand instead of the prostitution of the public service to private uses, its recognition as a high and honorable trust to be administered for the people's benefit, with efficiency, economy, and integrity. We demand, instead of the insolence, the proscription, and tyranny of "bossism" and "machine" rule, the free and conscientious exercise of private judgment in political affairs, and faithful discharge, by those who assume representative trusts, of the expressed will of the people.

5. We declare in favor of the following party reforms: First, that delegates to State Conventions be chosen by the people in the manner in which the candidates for General Assembly are chosen; second, that representation in State Conventions be by counties,

and apportioned according to their Republican vote; third, that State Conventions shall not be held without at least sixty days' notice, nor earlier than the second Wednesday of July, except in presidential years; fourth, that Republicans who voted for the Republican candidate for President at the presidential election next preceding shall be entitled to join in the choice of delegates to the State and National Conventions.

The Democratic State Convention met in Harrisburg, on the 28th and 29th of June, and nominated the following ticket: For Governor, Robert E. Pattison; Lieutenant-Governor, Chauncey F. Black; Supreme Judge, Silas M. Clark; Secretary of Internal Affairs, J. Simpson Africa; Congressman-at-large, Mortimer F. Elliott.

The following platform was adopted:

The Democratic party of Pennsylvania, holding fast to the faith that all power not delegated by the Constitution is reserved to the States and the people:

Upholding the sanctity of personal liberty, the security of personal property, and the rights of local self-government; demanding honesty and economy in the administration of government and the enforcement of all the provisions of the Constitution by the Legislature and the courts of this Commonwealth; declaring against monopolies and in sympathy with labor seeking its protection, and in favor of the protection of the industrial interests of Pennsylvania, at this time do solemnly protest against evils which the policy and practices of the Republican party, and the insolence of its long possession of office, have thus brought upon the country; therefore—

1. We do protest against what is called the boss system and the plundering of office-holders by assessments of money for political purposes; public offices are the property of no party, but are open to every citizen, honest, capable, and faithful to the Constitution, qualifications which Jefferson declared were the requisites for office.

2. We protest against the spoils system; it is a prostitution of the offices of the people, so that they become the mere perquisites of the politician.

3. We denounce all repudiation, State and Federal, because it is dishonest and destructive of that public morality upon which are founded the existence and perpetuity of our free institutions; it should be made odious, and the political party that aids it with alliance and abets it with office deserves public condemnation.

4. We denounce spoliation of the State Treasury, and immunity by pardon of those convicted of crimes whose acts are flagrant subversions of official trusts and wrongs done the people.

5. We believe the Republican party, as now organized and controlled, is based on fraud, force, and corruption, and there can be no hope for true reform except by the ballot-box excluding it from place and power.

6. The Democratic party demands of the Legislature an honest, just, and true apportionment.

7. Upon these declarations we invite the co-operation of all honest citizens who, with us, desire the re-establishment of honest government.

ROBERT EMORY PATTISON was born December 8, 1850, at Quantico, Somerset County, Maryland. His father, the Rev. R. H. Pattison, was ordered to Philadelphia by the Methodist Episcopal Conference when the son had reached his sixth year. There the latter passed through the successive grades of the common schools, and the Penn Grammar and Central High School. He became a law-student in 1869, and in 1872 commenced the practice of law, and was married. In 1877 he was elected



Comptroller for the city of Philadelphia, and in 1880 re-elected by a large majority.

Almost from his first induction into the office of Comptroller, Mr. Pattison invested it with a degree of importance which the law had given it, but which none of his predecessors had done. He adopted and maintained a wide view of the obligations of the office, and declined to hide behind technicalities that brought disgrace upon his predecessor. He refused to consider the office merely clerical, but investigated claims, and enraged



ROBERT EMORY PATTISON.

partisans by refusing to be a mere machine to deplete the city Treasury. In this inflexible purpose he recognized no claimant as Democrat or Republican. How the whole atmosphere of that office changed under his vigorous, vigilant, and healthy administration, and what complimentary enmity he won from many whose schemes have been rendered hopeless by his relentless scrutiny and determination, is a matter of public notoriety.

In view of all this, and of the fact that during his term complete administrative reform had been inaugurated in the second city of the

Union and the first in Pennsylvania, it was not strange that the Democratic State Convention found in him its nominee for Governor. Year by year the political issue of administrative reform had become the supreme concern of intelligent men. Recognizing his special fitness to embody this issue, the convention gravitated toward him on the sixth ballot, and without any adjournment after it began to ballot. His nomination was the well-considered action of an unusually earnest and intelligent body, and that no mistake was made is assured by the universal approbation with which it was received, not only by the party press of the State, but by all the independent journals of any standing, while it challenged the opposition.

At the election in November, 1882, Mr. Pattison was the successful candidate. The vote was as follows: Robert E. Pattison, Democrat, 355,791; James A. Beaver, Republican, 315,589; John Stewart, Independent Republican, 43,743; Thomas A. Armstrong, Labor, 23,484; Alfred C. Pettit, Temperance, 5,196.

Governor Pattison was inaugurated January 16, 1883, in the presence of the largest gathering that, in all probability, ever witnessed a Governor of Pennsylvania inducted into office. His inaugural address was in entire harmony with the pledges he made during the campaign on the side of reform and retrenchment; and shortly after he sent a message to the Legislature, in which he recommended his policy in very vigorous terms, citing wherein true reform could be secured, and urging in that connection the modification or repeal of certain laws, under which needless offices were created, and a waste of public funds was allowed. An acrimonious controversy followed, which resulted in the complete success of Governor Pattison's policy as it related to commissions and special legislation. A better feeling finally prevailed on all sides, save where personal ambition had been baffled by the young Governor appointing a Cabinet of his own choice; and, at date, every recommendation made to the Legislature has either been carried out, or bills introduced with that end in view.

Nominations were also made by the Temperance party.

ELECTION RETURNS.—The election in November resulted in the choice of the Democratic ticket. The vote was as follows:

	Democrat.	Republican.	Independent.	Greenback.	Temperance.
Governor.....	355,791	315,589	43,743	23,484	5,196
Lieutenant-Governor.....	353,642	317,614	43,577	19,475	4,662
Secretary of Internal Affairs.....	353,752	317,408	43,096	19,941	5,497
Congressman.....	351,043	323,255	40,995	20,400	4,642
Judge.....	355,935	315,163	41,990	19,285	4,459

For district Congressmen, fifteen Republicans, ten Democrats, one Greenback-Republican, and one Greenback-Democrat were elected. The Legislature of 1883 will be constituted as follows:

	Republican.	Democrat.
Senate.....	80	20
House of Representatives.....	88	113
Total members.....	118	133

PERSIA, an empire in Central Asia. The Shah is absolute ruler, with the power of disposing of the lives and property of his subjects. The present Shah is Nassr-ed-Din, born September 4, 1829. He succeeded his father, Shah Mohammed, September 10, 1848, and is the fourth of the Kajar dynasty, which gained the throne after the civil wars of 1779-1794. The Shah has two sons, Muzafer-ed-Din, the heir-apparent, born in 1850, and Djilal-el-Dauleh, born in 1853. The constitution of the empire is found in the laws of the Koran, and implicit obedience is paid to the Shah as vicegerent of the Prophet, governing according to the sacred precepts. The Shah formerly had only two ministers, the Grand Vizier and the Treasurer; but now the government is carried on in seven departments on the model of European cabinets, the other ministers being, however, subordinate in authority. The Vizier directs the foreign policy and commands the military forces. The empire is divided into twenty provinces, each governed by a beglerbeg, or civil and military governor, who is often a member of the royal family. The towns and villages elect the magistrates who dispense justice.

**AREA AND POPULATION.**—The area is about 634,000 square miles, a great portion of which is desert. The population is approximately 7,653,600, of whom 1,963,800 constitute the city, 3,780,000 the rural, and 1,909,800 the nomad population. The latter number comprises 260,100 Arabs, 720,000 Turkomans, 675,000 Kurds and Leks, 20,700 Beloochees and Gypsies, and 234,000 Bahtiares and Lures. In respect to religion, the population is divided into 6,860,600 Shiites, 760,000 Sunnites and other Mohammedan sects, 8,000 Guebres or Parsees, 19,000 Israelites, 43,000 Armenians, and 23,000 Nestorians and Chaldeans. The Imans Djuma and the Sheik-ul-Islam are official Moslem dignitaries, who receive emoluments from the Government; but the Mushtaheds, who hold no official position, are the real chiefs of the clergy. There are only five members of this priestly order. The Mushtahed who resides at Kerbela, near Bagdad, is recognized as the head of all. In choosing their associates, the Mushtaheds always select the candidate acclaimed by the people, who are the actual appointing power. The Armenians have two bishops, one a Roman Catholic, and both residing in Ispahan. The Christian sects are treated with perfect tolerance, but the Jews and the Guebres are harshly used.

Among the Mussulman population there are in every 1,000 inhabitants 495 males and 505 females; among the Armenians there are 528 males and 472 females.

A considerable proportion of the people of Persia receive a literary education and a larger portion possess the rudiments of education than in any country in Asia except China. There are many colleges supported by the Government, where, besides religion, Persian and

Arabian literature, and such science as is current in the East, are taught. Every family that is able employs tutors to instruct its sons.

The population of Teheran, the capital, is about 200,000; that of Tabreez or Tauris, the chief commercial emporium, 165,000; that of Ispahan and Meshed, about 60,000 each; of Kerman, 42,000; of Reshd, Kasbin, and Yezd, about 40,000 each; of Hamadan, Shiras, Kermansha, Dizfoul, and Kachan, about 20,000 each.

There were only 42 post-offices in 1879; the total number of letters forwarded was 419,630. The principal cities are most of them connected by telegraph lines. There were, in 1879, 3,650 miles of lines and 5,950 miles of wires. The number of dispatches sent in 1878 was about 500,000.

**COMMERCE.**—The external commerce of Persia is of small volume, the total exports amounting to about 1,250,000 toman or \$2,812,500, the imports to twice as much, or about \$5,625,000. (The toman is a gold piece worth \$2.25; the silver unit is the keran, of one tenth the value of the toman). The main part of the commerce of Persia centers in Tabreez, which is the market for the productions of Northern India, Samarcand, Bokhara, Cabool, and Beloochistan, and the emporium for the European trade, which is carried on by caravans with Constantinople by way of Trebizond. The principal article of import is cotton fabrics from England; the chief article of export is silk, which goes to France and England. Woolens, glass, paper, iron, copper, sugar, and tea are also imported. Among the other exports are tobacco, skins, carpets, opium, gums, wool, dates, cereals, and rice.

**ARMY.**—Military service was formerly for life, but by the law of 1875 the time was fixed at twelve years. The system of drawing by lot, the conscripted being permitted to provide substitutes, was ordained; but it has not been put in practice. The nizams, or regular infantry, muster 77 battalions of from 600 to 800 men each. About 1,500 men, recently organized by Austrian officers, are armed with Werndl rifles. The chassepot had previously been partially introduced. The armories contain about 9,000 Werndls, a few thousands of chassepots, and 50,000 old breech-loading muskets. The cavalry consists of the excellently mounted irregular troops which the tribes are required to furnish in time of war, and two regiments organized by Russian officers in the manner of Cossacks; the effective force is about 80,000. The artillery numbers 5,000 men, with 200 antiquated pieces, excepting 30 Uchatius guns given to five batteries instructed by Austrians. There is a militia, called the Tofangtchi, consisting of 24 companies of from 100 to 500 men each, which is employed only as a rural police.

**FINANCES.**—The receipts in 1876 amounted to about \$8,200,000, of which some \$7,000,000



were collected in money and the rest in kind, counting a bushel of grain worth a little over 25 cents. The expenses were about \$8,000,000. They comprised about \$3,400,000 for the army, \$1,500,000 for the court, \$1,150,000 for the clergy, \$350,000 for presents to great families, the Afghans, etc., \$1,300,000 for foreign affairs, \$250,000 for the other ministries, and \$50,000 for colleges. About \$600,000 came from direct taxes and \$1,000,000 from customs. The direct taxes are levied upon the villages, towns, and districts, which are assessed for a fixed annual sum, the quota being adjusted from time to time by royal assessors. There is no public debt. The surplus revenue of each year is turned into the Shah's treasury. The present Shah is believed to have amassed a fortune of over \$20,000,000, one half of which is represented by diamonds. The incidence of the taxes falls directly upon the laboring population. The Christians, Jews, and Parsees escape paying their proportionate share. The payments in kind are mostly used in the maintenance of the army.

**FOREIGN RELATIONS.**—The Shah has placed himself virtually under the protection of Russia. By the treaty, concluded on March 10th, adjusting the boundary between Persia and the Russian possessions east of the Caspian, the Shah ceded to Russia the northeastern rim of the Iranian plateau. The Persian ruler, by this act, places his realm entirely in the power of the Russians, admitting them within the impregnable mountain bulwarks at the edge of the plateau. If the Russians have the acquisition of Afghanistan in view, or if they entertained designs upon British India, the conceded territory gives them the command of a shorter and easier route to Herat than around the skirt of the plateau by way of Merv. Astrabad, 320 miles southeast of Krasnovodsky and 40 miles from the Persian port of Chikislar, has become the military and commercial center of Russia in the Transcaspian region. A railroad has been built from the port of Krasnovodsky to this post, placing it in steam communication with the Russian railroad system. The head of navigation on the Tejend, 350 miles above Herat, is only 60 miles distant from Astrabad. Herat is also approachable from Meshed by way of Keltechinan Pass, the distance being 220 miles, and between Meshed and Astrabad 50 miles. The economical value of the acquired territory surpasses its strategical importance. It embraces the foot-hills of the chains of Kubbet Dagh, Allah Akbar, and Muzderan, extending from Kizil-Arvat to Sarakhs. This district was the garden of ancient Khorassan, and is still as fertile, well-watered, and salubrious, as ever. The raids of the steppe Turkomans have caused the rich valleys to be deserted within the last two centuries. According to the Russian maps of sixty years ago, Sarakhs did not form a part of the Persian Empire. The Persians had a fort formerly on the right bank of the Redsh,

which they destroyed. They then established the present town of Sarakhs on the other side of the river, and the fortress, which has been manned with Persian soldiers for a quarter of a century.

This corner of Iran is better adapted for Russian colonization than any territory acquired by the Czar in the khanates. Persia, in subjecting herself to political dependence on Russia, places her hopes of commercial progress in the Russians. The Russians are exerting themselves to extend their traffic on the Caspian, and the caravan-trade with the regions beyond. A railroad is spoken of, to be built within three years by the Persian Government, from Teheran to the Caspian port of Reshd, and one to be built by Russia from Tiflis, through Erivan and Natchitchewan, to Julfa, and to be extended thence, by the aid of Russian capital, to Tabreez and Teheran. The dominance of Russian influence in Teheran dates from the fall of the chief minister, Mirza Hussein Khan, who was deprived of his post on account of pecculation. He returned to Meshed and commenced to fortify it, refusing to obey the orders summoning him to Teheran, until he suddenly died, it was said, of poison. His successor, Mirza Seid Khan, is said to stand in Russian pay.

**INTERNAL DISTURBANCES.**—The chief of the Bahtiaries, in the neighborhood of Ispahan, was murdered while on a visit to the governor, Djilal-es-Soltanes, the son of the Shah. The prince was suspected of the crime, actuated by the growing influence and power of the chief. The son of the latter died in like sudden and mysterious manner a few days later. These events roused the Bahtiaries to rebellion. The first force of 4,000 to 5,000 troops which was sent against them in August was defeated.

While the Bahtiaries raised the flag of rebellion in the south, the Turkomans continued to be the scourge of the north of Persia. Since the Russians received the submission of the Akhal Turkomans, and commenced paying court to the tribes of Merv, they appear to have been less eager to suppress marauding. The execution of a Turkoman chief, who was sentenced by the Russian governor of Astrabad, aroused the vengeance of the widow of the chief, who rendered the whole district unsafe.

**PERU (REPÚBLICA DEL PERÚ) AND BOLIVIA.** For details concerning territorial division, area, population, etc., reference may be made to the "Annual Cyclopædia" for 1873 and 1878, to the article "BOLIVIA" in the volume for 1879, and to the article "PERU" in that for 1881. Since the year 1882 has passed by without an end to the strife between Chili and portions of the Peruvian population headed by partisan chieftains, and since no practical basis has yet been arrived at for the conclusion of a formal armistice as a forerunner to peace, we shall mainly confine ourselves to making some extracts from the book of Mr. Clements



R. Markham, "The War between Peru and Chili, 1879-'82" (New York: R. Worthington, publisher).

In the preface we find the ensuing passage: "The authentic materials for a narrative of the war are now sufficiently extensive, although they are almost exclusively supplied from the Chilean side. The ground has been carefully described in a series of publications issued by the Chilean Hydrographic Department, entitled '*Noticias sobre las provincias litorales.*' The official dispatches, diplomatic notes, and reports of correspondents are contained in the '*Boletín de la guerra del Pacífico,*' published at Santiago periodically from April, 1879, to March, 1881. The history of the three campaigns has been written in copious detail by one of the most distinguished literary men in Chili, Don Benjamin Vicuña Mackenna. The author's powers of description, of delineating character, and of critical analysis are of a very high order. His industry in collecting materials is extraordinary, and it is equaled by his ability in arranging them. Vicuña Mackenna is, above all things, an historical biographer. He could not, if he would, omit a trait or an incident, however much its mention might tell against the view he advocates. His love of historical truth amounts to a passion. From no writer since the days of Ercilla are we more certain to get the good equally with the bad points of an enemy. His work is, therefore, invaluable.

"Don Diego Barros Arana, in his '*Historia de la guerra del Pacífico,*' gives us the history of the three campaigns, as well as of the naval warfare. His narrative is less interesting and not nearly in such full detail as that of Vicuña Mackenna. We also have the memoir of the Chilean Minister of War for 1881, which gave rise to an acrimonious paper war between the minister and the general commanding the army, and thus many things were made public. The general replied in a volume containing all the official dispatches. There are also a few monographs of special actions, such as '*El Combate Homérico*' and '*Estudios sobre la vida del Capitán Arturo Prat,*' which are useful. Chili, assuredly, has been fully heard, but Peru and Bolivia, apart from official reports, are silent so far as we are aware. If books have been published, they have not become accessible here. The whole story, with the exception of private letters regarding the proceedings or the fate of individuals, and mere official utterances, is told by Chileans. Impartiality and common fairness, therefore, demand the utmost care in judging of the acts and motives of their opponents. If an unbiased stranger does not adopt the Chilean view with regard to the causes of the war, the justice of its continuance, and the character of some of the events, he at least argues from the same premises. The facts have been supplied almost exclusively by one side; and, if the historian feels obliged to condemn the proceedings of Chilean statesmen and sol-

diers, he must, at the same time, commend the fairness of Chilean writers."

From the book of Mr. Markham we borrow the passage on "Peruvian railroads and finance": "On August 2, 1868, Colonel Balta was elected President of Peru. Led on by speculators and contractors, he was unfortunately induced to enter upon a career of extravagant expenditure with the help of foreign loans. He pushed forward the construction of railroads and other public works with feverish haste. In 1870 he raised a loan of £11,920,000 at 6 per cent, and in 1872 another of £36,800,000 to increase the old debt, and for the construction of public works. Colonel Balta also guaranteed a loan of £290,000 for a railroad; so that the whole liabilities of his government became £49,010,000, besides an internal debt of £4,000,000. It seems almost incredible that these loans could have been raised, when the revenue of Peru was notoriously small and precarious. The speculators who undertook to advance such sums, only a portion of which ever reached Peru, must have known perfectly well that the continuous payment of the interest on them was simply impossible. These matters are not intelligible to an outsider; but the historian will consider the unhappy people of Peru, not the exceedingly clever financiers who arranged the loans, and were well able to take care of themselves, as the victims. The railroads are largely in the hands of English capitalists. From Payta, the most northern port of Peru, there is a railroad, sixty-three miles long, to the city of Piura, facilitating the shipment of cotton-crops. Farther south a line, forty-five miles long, connects the port of Pimentel with Chiclayo and Lambayeque. The rice-crops of the Terretepe Valley are brought to the port of Eten by a line fifty miles in length, which is said to be entirely the property of an English house. The railroad from Magdalena to the port of Pacasmayo, ninety-three miles long, taps the fertile valley of Jequetepeque, and is a state enterprise. The sugar and rice estates of Chicania reach the coast by a line of twenty-five miles from Ascope to Malabrigo. The city of Truxillo is connected with its port of Salaverry by a line of eighty-five miles. The city of Huaraz, between two ranges of the Andes, is to have a railroad to the coast at Chimbote, one hundred and seventy-two miles long, but only fifty-two are as yet finished. The capital was connected with its port of Callao by a railroad, in 1851, and with the fashionable watering-place of Chorrillos in 1858. Another line, forty-five miles long, goes from Lima to Chancay. South of Lima the vineyards and cotton estates of Ica are joined to the port of Pisco by a line of forty-eight miles. The railroad from Mollendo to Arequipa was completed in 1870, and runs over one hundred and seventy miles of desert. In order to supply Mollendo with water, a pipe was laid alongside the line for eighty-five miles, starting near Arequipa, 8,000 feet above the



sea, and discharging 433,000 gallons in twenty-four hours. This is the largest iron aqueduct in the world. The line from the port of Ylo to Moquegua is sixty-three, and, from Arica to Tacna, thirty-nine miles long. There is also a system of railroads in Tarapacá, from the nitrate-of-soda works to the ports, comprising when finished one hundred and eighty miles. All these lines were planned to meet existing needs, and they tap rich and valuable districts, but the great lines across the Andes were undertaken prematurely. One passes from Callao and Lima, across the western and central Cordilleras to Oroya in the lofty valley of Jauja, and is to be one hundred and thirty-six miles long. It was commenced in 1870, and rises 5,000 feet in the first forty-six miles. It then threads intricate gorges of the Andes, along the ledges of precipices, and over bridges that seem suspended in the air. It tunnels the Andes at an altitude of 15,645 feet, the most elevated spot in the world where a piston-rod is moved by steam, and will terminate at Oroya, 12,178 feet above the sea. There are sixty-three tunnels. The bridge of Verrugas, spanning a chasm five hundred and eighty feet wide, rests on three piers, the center one of hollow wrought-iron, being two hundred and fifty-two feet high. Of this Oroya Railroad eighty-seven miles were completed when the war broke out, and it had cost £4,625,887. Another line crosses the Andes from Arequipa to Puno, on the shore of Lake Titicaca, which was opened in 1872, and is two hundred and thirty-two miles long. Steamers have been launched on the lake. The whole scheme of Peruvian railroads, if ever completed, would have a length of 1,281 miles, private lines 496 miles, and two projects partly private, altogether 2,030 miles, and cost £37,500,000. In 1867 a telegraph company laid down a number of lines. The rule of Colonel Balta, though ruinous to Peru from a financial point of view, was throughout a period of peace and internal prosperity, ending in the opening of an International Exhibition at Lima. His successor, Don Manuel Pardo, inaugurated August 2, 1872, was the first civilian who had been elected. He found his country loaded with a debt of £60,000,000, and that a sum of £4,000,000 was needed to pay the annual interest. A contract had been made with Messrs. Dryfus, of Paris, in 1869, in order to pay off another debt of £4,000,000 by the sale of 2,000,000 tons of guano, the delivery of which was to commence in 1872. But the whole of the proceeds of the guano was more than absorbed in meeting the liabilities created by the foreign loans. Both demands could not possibly be met, and the payments of the interest on the loans ceased in 1876. They had been regularly met since 1849, and the failure was a great national misfortune. All that the new President could do was to curtail the expenditure in every branch, and he hoped to bring it down to £3,000,000. The customs receipts only amounted to £1,500,-

000 in 1875, and there were no direct taxes. He reduced the army, regulated Chinese immigration, promoted the exploration of navigable streams leading to the Amazon, organized an efficient volume for the collection of statistics and for a census, and supported the interests of literature. He was the best President that Peru has ever known."

About the trade of his countrymen with Peru Mr. Markham observes: "As a customer of Great Britain, the Peruvian Republic held an important position. In 1878 Peru received woolen and cotton goods and other manufactures from us to the value of £1,369,836. In return, her exports to Great Britain in the same year were worth £5,232,305. The number of British vessels that entered Callao in 1877 was 720, of which 198 (tonnage, 194,973) were sailing vessels and 522 steamers. Englishmen, therefore, have material as well as moral reasons for regretting the ruinous disasters of so good a customer."

With reference to the natural resources of Peru, Mr. Markham remarks: "Peru found a strange source of wealth, which was as fatal to her as the great influx of gold and silver was to the mother-country. The trade-winds are loaded with moisture from the Atlantic, which produces the rich vegetation of the Amazon Valley; but when they reach the snowy ridges of the Andes the last drop of this moisture is wrung from them, and they come down to the Pacific coast without a particle. Guano can only accumulate, as a valuable manure, where there is no rain. The great deposits of nitrate of soda have also been formed in deserts where there is no rain. The exhausted lands of the Old World needed these manures, the farmers were willing to pay high prices for them, and there were vast deposits on the islands and headlands and in the deserts of Peru. A wise government would have treated this source of revenue as temporary and extraordinary. The Peruvians looked upon it as though it were permanent, abolishing other taxes, and recklessly increasing the expenditure. The guano demoralized public men, and is the chief cause of the country's ruin. The exportation of guano commenced in 1846, and from 1851 to 1860 the amount of shipping that loaded at the Chincha Islands represented 2,860,000 tons. Between 1853 and 1872 there were 8,000,000 tons shipped; and in the latter year the Chincha Island deposits were practically exhausted. But other deposits were discovered. From 1869 to 1871 over 800,000 tons were shipped from the Guafape Islands; and since 1874 large deposits have been discovered on headlands of the coast of Tarapacá. In 1875 the guano exports amounted to 378,683 tons, valued at £4,000,000. The deposits of nitrate of soda have been worked since 1830 in the province of Tarapacá, the chief ports of export being Iquique and Pisagua. From 1820 to 1850 the export amounted to 239,860 tons. It reached its maximum in 1875, when 326,869 tons left the



country in one year. In 1877 the number of ships that cleared from the port of Iquique was 253. In 1878 the number of tons of nitrate exported from the ports of Tarapacá was 269,327. Other industries rapidly rose in importance. The sugar estates on the coast were worked by negro-slave labor until the emancipation of 1855. Chinese laborers then began to arrive, and over 58,000 landed between 1860 and 1872. In 1859 the sugar exported from Peru was valued at £90,000; in 1876 it had increased to 71,700 tons, valued at £1,219,000, of which quantity 63,370 tons went to Great Britain. A very excellent kind of cotton is grown in the coast valleys, the value of the crops in 1877 being estimated at £160,000; and there are extensive vineyards. Rice is also cultivated in the north, besides olives, mulberries, and cochineal. From the Andes the staple exports are silver and wool."

Respecting political events in 1882 Mr. Markham furnishes the ensuing general sketch: "The Provisional President, Piérola, resigned office in November, 1881, and, proceeding to Lima as a private citizen, he has since left the country. Generals Buendia and Silva retired into private life at the same time. Admiral Montero, in the forced absence of Dr. García Calderón, then became the head of the Peruvian Government as Vice-President in charge. He remained for some time at Huaraz, in the north of Peru; but in August, 1882, he went to Arequipa, where he was enthusiastically received. He proceeded to form a government. Captain Camilo Carrillo became Minister of the Interior; Dr. M. del Valle, of Foreign Affairs; Dr. Epifanio Serpe, of Justice; Dr. F.F. Oviedo, of Finance; and Colonel Manuel Velarde, of War. Colonel Iglesias, the hero of the Morro Solar, holds the military command in the north, with his headquarters in the Department of Caxamarca. He has summoned a representative assembly of the northern departments to express their views regarding the terms of peace. The indefatigable Cáceres, now promoted to the rank of general, is in command in the central departments, actively engaged in organizing an efficient force. At Arequipa the accomplished Captain Camilo Carrillo assembled a force of five thousand men, with several guns, and received arms and ammunition by way of Bolivia. Since the arrival of Vice-President Montero at Arequipa, and the assumption of ministerial office by Captain Carrillo, the command of the troops in the south has been given to Colonel Belisario Suarez. Colonel Canevaro, who had recovered from the severe wound he received at the battle of Miraflores, has taken the command of the National Guard. The Government of Peru has thus been reorganized, after the interval of unavoidable confusion caused by the loss of the capital, and the paralyzing calamity of January, 1881. Bolivia has remained loyally true to her ally, and has also been occupied in the reorganization of her army. In September, 1882,

Montero proceeded to La Paz to have an interview with General Campero, and the resolution of the allies seems to be to hold out until less hard and more just and reasonable terms of peace can be obtained from Chili. As for the Chilean occupation, enormous sums of money have been extorted at Lima from private persons, and a great number of leading citizens have been seized and imprisoned or transported to captivity in remote parts of Chili. The educational establishments, including the Colleges of San Carlos and San Fernando, the School of Arts, and the National Library, have been converted into barracks, their treasures robbed or destroyed. The Peruvian students now have neither books, instruments, nor instruction. Meanwhile predatory raids have been made by the Chileans into the interior from several points on the coast. Soon after the occupation of Lima, Colonel Aristides Martínez, with an adequate force, was landed at Chimbote, and occupied the city of Truxillo. Another smaller force took possession of Pacasmayo. A third party made a dash at the silver-mines of the Cerro Pasco, and penetrated as far as Huancayo, where a revolting slaughter of half-armed Indians was committed. In January, 1882, a force of five thousand men occupied the valleys of Tarma and Jaña, under Colonel del Canto, who placed garrisons in those towns, as well as at the Oroya bridge, in Concepción, and in Huancayo. Other parties were sent to Cañete, Chinca, Pisco, and Ica, apparently with the sole object of plunder and useless bloodshed. In the Andean valley of the Jaña the descendants of the Huanca Indians made a brave resistance to the predatory incursions of the Chilean garrisons, armed only with spears and slings, and were mercilessly slaughtered, as their ancestors had been by Pizarro. But help was at hand. General Cáceres was actively engaged at Ayacucho during the first months of the year 1882 in organizing a force for the defense of the interior of Peru. In July he was able to take the field. Colonel del Canto, with the bulk of the Chilean force, was at Huancayo, and there was a garrison of seventy-seven men of the Chacabuco regiment in the town of Concepción. The first encounter was at Marcabaya, a small village, two leagues from Huancayo. The Peruvians then advanced to Concepción, and, after a long defense of the barracks, the Chilean garrison was cut to pieces on July 9, 1882. Del Canto then assembled the other garrisons from Tarma, Jaña, and Huancayo, and retreated by way of Oroya to the terminus of the railroad at Chila. He burned the town of Concepción to ashes, in revenge for the Chilean reverse.

"Meanwhile a small Peruvian force, under Colonel Tafur, had crossed the Oroya and encamped on the heights of Chacapalca. He was surprised by two hundred Chilean carbineers under Lieutenant Stüven and forced to retreat with a loss of forty-eight prisoners. The Pe-



ruvians still remained in threatening force in the neighborhood, and Stuten, embarrassed by his prisoners, proceeded to commit a cruel act, which shows how utterly demoralized the Chilians had become. He ordered the Peruvian prisoners to be formed in a line and shot them down to a man. The wounded were dispatched by the Chilians with their long knives. The retreat was then continued, and the invaders, covered with disgrace by this act of infamy, evacuated the valley of Jauja. General Caceres then sent some troops, by a flanking march, to a point down the line of railway, to intercept the retreat of Canto. On the 22d of July the Chilian garrison, numbering one hundred men, at San Bartolomé, a place on the railway about fifty miles from Lima, was resolutely attacked. But re-enforcements arrived from Lima, under General Gana, and the Peruvians retired over the mountains in good order. The Chilians destroyed several villages along the line, and finally retreated to Chorica, twenty-four miles from Lima. General Caceres cleared this part of Peru of the invaders. He established his headquarters at Tarma, in August, 1882, and continued his labor of arming and organizing his forces. Huancas, Tquichanos, Pocras, and Morochucos flocked in thousands to his standard, all eager to defend their beloved villages from invasion. But the task of arming and drilling them must needs be slow and difficult. Their leader, however, is one who is not easily turned away from his purpose. Ayacucho is the home of Andres Caceres. He is surrounded by his own people. They know him as the man who has fought for his country in almost every action since the invaders landed at Pisagua. A similar need-

less extension of the horrors of war was planned by the Chilians in Northern Peru, where Colonel Iglesias conducted the defense. A force of three hundred men, landed at the port of Pacasmayo, advanced up the Jequetepeque Valley, with the intention of ravaging the Department of Caxamarca. Met by Iglesias at San Pablo, twelve miles from Caxamarca, they were defeated, and fled back to Pacasmayo, leaving their field hospital in the hands of the Peruvians. But they received re-enforcements, and eventually, like Pizarro before them, entered Caxamarca as conquering invaders. After converting two of the ancient churches into ruins, and burning several villages, they evacuated the historical city so famous for similar crimes committed there three hundred and fifty years ago. They then entirely destroyed the town of Chota, and finally retreated to the coast in September, 1882.

"Peru waits in broken-hearted suspense, but with undaunted front, for reasonable terms of peace. The province of Tarapacá to Camarones must be ceded. The nitrate and guano must go with it, and also the claims on the revenue derived from nitrate and guano. These false riches have never been other than a curse to their possessors."

As some peace settlement is likely soon to be brought about between Peru and Chili, it will not be amiss to study the commercial statistics having reference to the trade of the former with the three leading trading nations, the United States, England, and France, up to and subsequent to the outbreak of hostilities, in view of the revival in this Peruvian trade which may gradually be brought about after the re-establishment of peace:

IMPORT OF PERUVIAN PRODUCTS INTO THE UNITED STATES, AND EXPORT OF AMERICAN DOMESTIC GOODS TO PERU.

IMPORT.	Guano.	Nitrate of soda.	Raw sugar.	Total import from Peru.	Domestic export to Peru.
Fiscal years:	Tons.	Pounds.	Pounds.		
1869.....	1,860	14,398,063	15,710,110	\$1,386,310	\$1,556,534
1870.....	44,129	15,298,521	18,826,590	2,557,838	1,858,244
1871.....	97,386	84,999,332	11,288,544	4,731,480	2,279,778
1872.....	11,654	27,188,564	9,079,577	1,668,958	4,439,995
1873.....	2,722	44,158,651	1,142,595	1,186,161	2,671,534
1874.....	5,432	44,393,855	1,223,188	1,256,286	1,811,869
1875.....	17,045	41,644,264	508,700	1,291,285	2,448,657
1876.....	17,864	85,488,433	18,200	1,426,043	1,001,722
1877.....	18,451	20,221,104	16,807	1,479,511	1,289,006
1878.....	20,932	30,452,962	257,661	1,531,591	975,507
1879.....	15,087	68,992,980	2,018,247	1,857,539	1,293,991
1880.....	400	14,973,850	2,121,244	861,303	907,603
1881.....	.....	24,676,514	.....	760,556	93,735
Total.....	252,542	425,827,093	57,156,667	\$21,495,106	\$22,573,729

During the fiscal year 1880 the chief articles of domestic merchandise exported to Peru consisted of breadstuffs, \$475,604; manufactures of iron and steel, \$100,552; woodenware, \$71,127; provisions, \$70,935; quicksilver, \$39,877; cotton goods, \$23,995, and petroleum, \$19,901.

In 1882 our export of domestic merchandise to Peru reached \$533,823, while we imported \$3,029,676 worth of Peruvian products, mostly nitrate.

IMPORTS FROM PERU.

Into the United States, 1859-'68....	\$6,048,806
" " 1869-'78....	18,515,833
" " 1879-'80....	2,219,167
Into United Kingdom, 1859-'68....	\$186,657,342
" " 1869-'78....	229,804,310
" " 1879-'80....	31,832,531
Into France.....	898,204,183
" " 1859-'68....	\$50,968,800
" " 1869-'78....	88,221,408
" " 1879-'80....	13,504,586
Total imports, 1859-'80.....	\$577,472,095

## EXPORTS TO PERU.

From the United States, 1859-'63....	\$10,143,625	
" " 1869-'78.....	21,223,865	
" " 1879-'80.....	2,223,498	\$38,590,988
From United Kingdom, 1859-'63....	\$58,689,679	
" " 1869-'78.....	95,850,374	
" " 1879-'80.....	5,945,983	159,986,036
From France.....	\$65,955,600	
" " 1869-'78.....	64,481,000	
" " 1879-'80.....	8,814,893	194,251,493
Total exports, 1859-'80.....	\$327,923,517	
Total trade with the United States.....	\$60,373,844	
" " United Kingdom.....	158,280,219	
" " France.....	286,646,549	
Grand total.....	\$905,800,612	

## SHIPMENTS OF NITRATE OF SODA FROM THE WEST COAST.

	1882.	1881.	1880.
	Quintals.*	Quintals.	Quintals.
To the north of Europe....	9,103,800	6,284,857	4,005,453
To the Mediterranean....	153,180	73,526	45,681
To the West Indies.....	24,528		
To the U. S. Atlantic.....	1,237,593	1,204,183	689,855
To the U. S. West coast....	173,925	157,114	121,567
Total.....	10,703,026	7,719,680	4,812,006

The preceding tabular statement shows that prior to the war, in spite of the gradual exhaustion of the guano deposits in Peru, the export figures from that country were steadily on the increase in its dealings with the three nations named, the large nitrate of soda production more than compensating for any falling off in guano. Importation, on the other hand, though also about doubling from the United States and England during the second decade we have given, had become stationary from France. During the twenty-two years specified, England did with Peru about twice the amount of business which was transacted between France and Peru, and more than nine times as much as the United States did with that country. This fully demonstrates the correctness of Mr. Markham's remarks about the importance of Peru as a customer of England. Ruined and crippled as Peru is at present, it will, however, take a great many years ere that country will become again what it has been in this respect, if ever it does.

BOLIVIA (REPÚBLICA DE BOLIVIA).—For particulars concerning area, territorial division, and population, reference may be made to the "Annual Cyclopædia" for 1877. The formation of a new department, with Tupiza for its capital, is said to be contemplated.

The President of the Republic is General Campero (since June 1, 1880), the First Vice-President is Dr. Aniceto Arce, and the Second Vice-President, Dr. B. Salinas. The Cabinet was composed of the following ministers: Interior and Foreign Affairs, Dr. P. J. Silveti; Finance, Dr. A. Quijarro; Public Worship, etc., Dr. P. H. Vargas; War, General J. M. Rendon.

The Bolivian Envoy Extraordinary and Minister Plenipotentiary to the United States is

Dr. L. Cabrera, and the Bolivian Consul-General at New York is Señor Obarrio.

The United States Minister Resident and Consul-General in Bolivia is Mr. G. Manney.

The Metropolitan Archbishop is Dr. Puch y Solona (elevated in 1861), and there are the following bishops: La Paz, Dr. Juan de Dios Bosque (1874); Cochabamba, F. M. del Granado (1872); and Santa Cruz de la Sierra, J. J. Valdivia (1879).

It is impossible to state the exact condition or number of the Bolivian forces during the past year, but it is to be presumed that the troops which spent most of the year at Oruro, under the command of the General-President, represent but a small proportion of the twenty thousand "fighting men" who were called to arms immediately after the commencement of the war with Chili. Previous to that time the regulation strength of the standing army was about three thousand, comprising eight generals, three hundred and fifty-nine superior, and six hundred and fifty-four subaltern officers. This force, according to official reports, cost the republic \$2,000,000 annually.

In the budget for 1880-'81, the first return of the sort published by the Finance Department since 1873, the estimated revenue and expenditure were set down at \$3,465,790 and \$4,799,225 respectively, showing a deficit of \$1,333,435. Among the items of expenditure may be mentioned that for the War Department, \$2,871,959. No mention is made of there being any provision made for covering the deficit just alluded to.

The tide of Bolivia's foreign commerce was effectually checked for a time by the war, and, when the reaction at length set in, the direction of the current was for the most part completely reversed. Although Bolivia had two ports exclusively her own, Cobija and Mejillone, it was found much more convenient to carry on trade through the Peruvian port of Arica, for which facility Bolivia paid a tax of five per cent to Peru. Soon after the beginning of the war, however, the Bolivian seaports proper and Arica were successively occupied by the Chilians, and held in a state of blockade for a year. The first two have remained permanently closed to Bolivian traffic, and the demand by the Chilians of fifty instead of five per cent on goods passing through Arica *in transitu* for Bolivia must, if persisted in, eventually determine the withdrawal of Bolivian trade from that port. In the face of these adverse circumstances Bolivia sought and has found a comparatively ready channel to the Atlantic seaboard through the Argentine Republic. The route—being by mule, *via* Salta or Jujuy to Tucuman, thence by rail to Rosario, and lastly down the river Parana to Buenos Ayres—already offers many advantages, such as transportation at half the rates charged for merchandise intended for consumption on Argentine territory, absolute freedom from duties, and the enjoyment, besides, of the privi-

\* One quintal = one hundred pounds Spanish.



lege of free storage in the Argentine custom-houses. These liberal concessions show how fully the Buenos Ayres Government comprehends the future importance of the Bolivian commerce. In the last-named city, and in Rosario, agencies have been established; a large number of mules have been placed on the route, thus still further reducing freights; lodging-houses and hotels have been opened where such conveniences were unknown; new industries have been established; and frequent traffic has led to such improvement in the condition of the roads that it is said to be now possible "to ride in a carriage from Buenos Ayres to Potosi." Transportation companies run wagons over the route, carrying goods into the interior of Bolivia, and taking back minerals; and when the railway from Tucuman to Jujuy is completed, and it becomes possible to travel direct from the Argentine capital to that city, freights will reach the lowest level of cheapness, and it is presumed that both North and South Bolivia will finally transfer their business from Valparaiso to Buenos Ayres.

The Bolivian trade with the Argentine Republic, for the year 1880 was of the total value of \$2,013,642, against \$683,045 for 1879, as follows:

Exports to the Argentine Republic.....	\$32,007
Imports from the Argentine Republic.....	\$60,113
<i>In transitu</i> from Bolivia.....	1,570,308
<i>In transitu</i> to Bolivia.....	51,214
Total in 1880.....	\$2,013,642
Total in 1879.....	683,045
Increase.....	\$1,330,597

The transit trade from Bolivia through the Argentine Republic, in 1880, was as exhibited in the following table:

ARTICLES.	Value.
Bismuth.....	\$31,815
Quinine.....	54,566
Hides.....	15,406
Tin.....	21,061
Silver.....	1,416,953
Total.....	\$1,570,308

The commodities comprising the transit trade through the Argentine Republic to Bolivia in the same year were as follow:

ARTICLES.	Value.
Quicksilver.....	\$6,230
Sugar, refined.....	2,099
Drugs.....	5,219
Iron-work.....	11,276
Agricultural implements.....	117
Machinery.....	15,645
Cotton goods.....	6,451
Woods.....	995
Canned preserves.....	1,735
Sundries.....	1,427
Total.....	\$51,214

In 1882 the Congress was petitioned for a concession for the construction of a railway from La Paz, with various branches, and the main line of which should effect a junction with the Central Argentine Railway, the extension of which last to Jujuy has been already referred to.

PETROLEUM, STATISTICS OF, during the year ending May 31, 1880:

I. Number of firms and corporations reported.....	86
II. Amount of capital invested.....	\$27,395,746
III. Hands employed: men, 9,493; women, 25; children, 346.....	9,569
IV. Wages, total amount paid for.....	\$4,381,372
V. Materials:	

1. Oil:	
Number of gallons crude oil used.....	731,533,127
Value.....	\$16,340,581

2. Fuel:	
Anthracite coal, tons.....	179,997
Value.....	\$446,922
Bituminous coal, tons.....	504,667
Value.....	\$580,983
Wood, cords.....	1,471
Value.....	\$6,355
Coke, bushels.....	303,596
Value.....	\$13,513
Naphtha, gallons.....	2,392,164
Value.....	\$42,315
Residuum, gallons.....	11,765,705
Value.....	\$229,215

3. Chemicals:	
Sulphur, tons.....	3
Value.....	\$180
Sulphuric acid, tons.....	45,313
Value.....	\$1,206,052
Hydrochloric acid, pounds.....	3,424
Value.....	\$63
Soda-ash, tons.....	411
Value.....	\$10,427
Caustic soda, tons.....	772
Value.....	\$85,064
Salt-soda, pounds.....	96,643
Value.....	\$1,423
Aqua-ammonia, pounds.....	160,160
Value.....	\$8,697
Lime, bushels.....	797
Value.....	\$159
Bone-black, tons.....	1,990
Value.....	\$62,315

4. Packages:	
Barrels.....	9,717,306
Value.....	\$11,618,307
Tin cans.....	23,541,089
Value.....	\$2,793,997
Cases.....	6,452,501
Value.....	\$906,911
Bungs, paint, etc., value.....	645,412

Total value of raw materials..... \$34,999,101

VI. Products:	
1. Rhigoline, barrels.....	5,363
Value.....	\$29,117
2. Gasoline, barrels.....	289,555
Value.....	\$1,123,166
3. Naphtha, barrels.....	1,212,626
Value.....	\$1,833,395
4. Illuminating oil, barrels.....	11,092,249
Value.....	\$36,839,613
5. Mineral sperm, barrels.....	16,514
Value.....	\$202,725
6. Reduced petroleum for cylinders, barrels.....	26,018
Value.....	\$971,020
7. Reduced petroleum for journals, barrels.....	204,841
Value.....	\$1,024,017
8. Decolorized lubricating oils, barrels.....	70,415
Value.....	\$611,572
9. Paraffine oil, barrels.....	79,465
Value.....	\$403,023
10. Residuum, barrels.....	293,133
Value.....	\$297,529
11. Paraffine-wax, pounds.....	7,889,626
Value.....	\$681,944
12. Petroleum-ointment, harness-oil, etc., value.....	\$323,097

Total value of manufactured products..... \$43,705,213

Boilers in use.....	374
Horse-power of same.....	12,744
Engines in use.....	885
Pumps in use.....	200
Buildings, number.....	866
“ value.....	\$1,899,288
Machinery, value.....	3,737,395
Loss during the year from fire and other accidents.....	104,631

# PHYSIOLOGY. CEREBRAL LOCALIZATION.

—Dr. Sigmund Exner has proposed a new system of cerebral localization, in which, instead of depending on experiments upon animals and the application of the results to the human brain, he fixes the seats of the several functions of the brain by deduction from the results of autopsies, and the light they throw on the relations of disease and the brain. The localizations as determined in his system agree generally as to their main features with those fixed by Dr. Ferrier from his experiments upon animals, but with some differences in detail. Dr. Exner distinguishes between absolute areas or centers of action, lesion of which always causes the same symptom, and relative areas or centers, lesion of which does not always, but only frequently, cause affection of the function with which they are supposed to be in relation; and he admits that the centers or areas of different organs, instead of being sharply defined and separated, run into each other, and are even partly inclosed one within another. In regard to the last point, he has remarked, in defending his opinions against criticisms by Professor Ferrier, that "there is no fact that would support the opinion that the part designated in the cortex as centrum has no other function than the one which caused it to be called 'centrum'; neither is there any fact which would support the idea that these centers are sharply circumscribed, that the organ of the leg extends, as on a map, as far as a designated limit, on which another organ begins. Anatomy and histology of the cortex, which teach that from every part of it fibres in immense quantities break through into the neighboring areas, are decidedly against such a view; and it is the result of preconceived opinion when every case is considered obscure and rejected in which, in spite of the lesion being very small, there were motor disturbances in both extremities. I consider a view based on such principles, according to which a 'centrum,' recognized as 'motor centrum,' can only have connection with the muscle group belonging to it, and with nothing else, as an hypothesis which prevents an impartial research. . . . I have proved . . . that from the greater part of the cerebral cortex (visible from above) of the rabbit we can call forth movement in both fore paws by electric irritation, and that these movements are transmitted by fibres which penetrate from the cortex into the white substance of the hemispheres."

**PHYSIOLOGY OF EXERCISE.**—Professor Du Bois-Reymond has shown, in an address on the "Physiology of Exercise," before the Institute for Military Surgeons, at Berlin, how the functions of exercise are much more extensive than has been popularly supposed, and how that exercise may stand in intimate connection with natural selection as a factor in the improvement of the higher animals and races. Having described the generally known effects of exercise in facilitating certain movements, harden-

ing the tissues and developing glands, and in making the system more secure against certain kinds of injury, he gives, as the broader definition of the term exercise, the frequent repetition of a more or less complicated action of the body with the co-operation of the mind, or of an action of the mind alone, for the purpose of being able to perform it better. Exercise has generally been spoken of in connection with the body only, or with the muscular system; but "it is easy to show the error of this view, and to demonstrate that such bodily exercises as gymnastics, fencing, swimming, riding, dancing, and skating are much more exercises of the central nervous system, of the brain and spinal marrow." Every action of our body as a motive apparatus depends more upon the co-operation of the muscles than upon the force of their contractions. In order to execute a composite motion, the muscles must begin to work in the proper order, and the energy of each of them must increase, halt, and diminish according to a certain law, so as to produce the proper combination of positions and velocities. On this point Johann Müller has a pertinent remark, that improvement in exercises of the body often consists nearly as much in the suppression of unnecessary by-motions as in acquiring dexterity in essential motions. Still other faculties come into action in executing these composite motions. The sight, the sense of pressure, the muscular sense, and the mind must be prepared to take in the position of the body at each instant, so that the muscles may be in a proper state of adjustment. Thus, not only the motor, but the sensory nervous system also, and the mental functions, are capable of being exercised, and need it; and in all skilled work, while muscular strength and facility are absolutely necessary, the supreme essential is the control by the central nervous system and the mind. In all these processes, the more any composite movement is practiced, the more unconscious is the act of the nervous system directing it, until at last the latter can not be distinguished from spontaneous nervous mechanisms like the involuntary reflex and by-movements. Practice further exhibits its influence on the purely sensory side of the nervous system, training the musical ear, improving the local sense and the color sense of the eye, and teaching such wonderful arts as quick reading and the instantaneous taking in of fleeting phenomena. As it induces the discontinuance of unused muscles, it also teaches us to neglect unused images; and, as exercise refines the senses, neglect stupefies them.

Man is thus adapted to self-improvement by means of exercise. "It makes his muscles stronger and more enduring; his skin becomes fortified against all injury; through exercise his limbs become more flexible, his glands more productive. It fits his central nerve-system for the most complicated functions; it sharpens his senses, and by it his mind, react-



ing upon itself, is able to augment its own elasticity and versatility." We may ask, then, "Is not this one of the means, perhaps the principal one, by which the collectivity of living existence becomes a self-improving machine? . . . if the living being is improved by exercise, does not this also explain the progress of the aggregate?" To this query are apparently opposed the observed facts that only the most highly organized animals are amenable to exercise, and that even these animals do not of themselves exercise and perfect themselves, but do so only when man takes them to school. To these it is replied that the lower animals and the higher animals in their natural state have already acquired, perhaps by the aid of exercise, in their instincts, all the faculties they require for the maintenance of their species, and there is no room under those conditions for further improvement or for development in new directions. "Susceptibility to exercise first enters into the animal world when the maintenance of the individual and the species has been so assured, through outer and inner circumstances, that the creature does not need a further particular one-sided development." Improvement by natural selection must be considered as a co-factor with improvement by exercise, in explaining the adaptability of organic nature; and if we do not concede "that the adaptive quality originated otherwise than mechanically, we must conclude that in the struggle for existence those creatures prevailed which, by the exercise of their natural functions, casually increased their fitness for those functions, or did this more than others, and that the beings so favored transmitted this their happy gift to their posterity for further increase. Thus originated an animal world susceptible of exercise; thus was originated natural selection itself, in the exercise of an important aid; finally, thus became the whole of life, like the individual, a self-improving machine."

**EXERCISE DURING INFANTILE DEVELOPMENT.**—The practical question whether systematic exercise should be employed for the physical development of infants and young children has been frequently asked, and has received considerable attention, with some attempts to devise methods for the purpose, but as yet with no very satisfactory results. In considering the form of exercise that might be employed for very young children, it should be remembered that at no period in life does the organism exhibit greater developmental activity than during the first years of existence. Hence it is not advisable that fatigue should be allowed to depress the vital powers, and so interfere with the processes of growth and nutrition. At the same time, it must be borne in mind that a desire for exercise seems to be inherent in the infant. This becomes apparent at a glance when a healthy young child is stripped and laid on a bed, leaving the body and limbs unhampered. Its movements are almost cease-

less; all parts of the body are brought into play, until it seems as if the child were trying to turn itself inside out; and, at the same time, the look of satisfaction which overspreads the countenance shows that the operation is thoroughly enjoyed. This natural exercise should be encouraged, and, instead of being kept, as it too frequently is for the greater part of the day, tightly held in its nurse's arms, or confined in its cot, weighed down with heavy bed-clothes, which restrain its slightest movement, the child should for some time each day be allowed to roll freely on a mattress, lightly and loosely clad, so that it can indulge freely and unhampered in the natural and instinctive exercise of its limbs. As it gets older the desire for exercise seems, if possible, to increase, and it is never tired of creeping about and making premature attempts to walk. While these efforts should be encouraged, they should never be unduly prolonged. As the child grows older, and becomes firmer on its feet, combined movements seem to become its object, and these also may profitably be encouraged. But artificial provisions for exercise are best dispensed with until after the sixth or seventh year. What seems of most importance, and what, unfortunately, is most generally overlooked, is the necessity of securing for the young child complete freedom of all its movements, and thus permitting it to engage in spontaneous exercise without let or hindrance.

**ORIGIN AND DESTINY OF THE FAT-CELLS.**—Professor Simon F. Gage, of Cornell University, has published an account of some microscopic investigations he has made to ascertain the origin and destiny of the fat-cells. His observations were made upon the *Necturus*, or *Megobryanchus*, a perennibranchiate amphibian of the lakes of Western New York. Microscopic investigations have unmistakably shown that the fat of the body does not exist free, but in small, circumscribed masses, composed of protoplasmic cells simply holding fat in readiness for the use of the system. Two theories had prevailed with respect to the origin of these cells: one, held by Von Wittig, Virchow, and others, that they are fixed or branched connective-tissue corpuscles modified into fat-cells; the other, supported by Ranvier, Hoggan, and others, that they are developed from special plasma cells, or from the migratory corpuscles become quiescent for the time. The result of Professor Gage's investigations appears to establish the fact that branched connective-tissue cells become fat-cells by being partly or wholly gorged with fat; and also makes it plausible, from the presence of fat in the small unbranched cells, that migratory corpuscles may become quiescent and assume the duties of fat reservoirs. Thus the two theories are harmonized, and both are shown partly to include the truth. The destiny or purpose of the fat-cell is to be a reservoir, serving to hold a store for the future use of the animal;

and it appears that, whenever the fat is given up, the cells regain their original character, and become, in the one case, simply branched or pigment cells, and, in the other case, special or migratory cells. It is also indicated that the cells, except when too fully gorged with fat, can perform, in part at least, their proper functions.

**THE ACTION OF ANTI-FEBRILE DRUGS ON BODILY TEMPERATURE.**—Drs. H. C. Wood and E. T. Reichert have published the results of fifty experiments which they have made to determine the exact nature of the action of anti-febrile remedies. The bodily temperature is the result of the play between the two antagonistic functions of the production and the dissipation of heat, and the point to be ascertained in the experiments was to determine to which of these functions the remedies tested contributed. In seven experiments with quinine the production and dissipation were both increased, and in all but one of them—in which both effects were equal—the increase in dissipation was much more decided than was that in production. In two of three experiments with cinchona sulphate, dissipation was more increased than production. The same was the case in two trials with cinchonidia sulphate, while the inverse took place in one trial. In fourteen experiments with potash salts (excluding the nitrites) both functions were stimulated, equally in two, while in six dissipation, and in the other six production, was more stimulated. The differences were so small in all the cases that the varying results may be attributed to accidental and uncontrollable influences. A slight increase in the production of heat was observed in two experiments with potassium nitrite, to which, however, the authors do not attach much importance, on account of the transient nature of the effect. With caffeine, the increase of production appeared to be slightly greater than that of dissipation. With alcohol, the average increase in five experiments was the same in both functions, a result in close accord with that which Dr. Bevan Lewis has obtained with a different instrument. The authors do not assume that anything is proved by their experiments except that “at present we have no sufficient evidence as to whether it is heat production or heat dissipation that is primarily affected by the cinchona alkaloids, alcohol, or the potash salts; and that to attempt to reason until the next step is taken by solid experimental research is to abandon firm ground for the cloud-land of speculation.”

#### INFLUENCE OF ACID ON SALIVARY DIGESTION.

—The investigation of the influence of peptone and of certain acids and salts on the digestive action of saliva has been continued by Messrs. Chittenden and Ely, of the Sheffield Scientific School, and Messrs. Langley and Eves, of Cambridge, England. Messrs. Chittenden and Griswold had found in previous experiments that human mixed saliva in the presence of an equal

volume of artificial gastric juice, containing .05 per cent of hydrochloric acid, is capable of forming from a given quantity of starch a much larger amount of sugar than the same quantity of saliva alone can do under a like degree of dilution; a result that is the more remarkable when it is remembered that the same per cent of acid by itself greatly retards the diastatic action. More recent experiments by Messrs. Chittenden and Ely go to show, that while particular products of digestion may exercise a retarding influence upon the action of the ferment which has generated them, by clogging it, that is not necessarily the case when the product of one digestive process is associated with a different allied ferment; and that peptones, a product of gastric digestion, exercise a decided influence on salivary digestion, stimulating the ferment to increased action, particularly in the presence of acid, which of itself completely prevents the conversion of starch into sugar. The experiments from which this view was deduced were first made with peptones in simple aqueous solution, in which condition it appeared that, when they were present to the extent of from 1 to 2 per cent, they caused an increased conversion of starch into sugar, amounting on an average to 4 per cent. The stimulating action of the peptones was clearly not due to the inorganic salts contained in them, for the latter were shown to have, by themselves, in aqueous solution, a retarding influence. When the peptones were tested in an acid solution of the strength of .025 per cent, their presence in the proportion of 1 per cent was found to exercise a very remarkable influence on the diastatic action of the saliva, and to increase the conversion of starch by 7 per cent. Increasing the amount of peptones to 2 per cent did not seem to have any effect in modifying the result; and, in acid solutions of increased strength, the peptones appeared to exercise but slight, if any, influence. The question was next examined, how far inorganic salts could influence the action of the ferment in an acid solution of .025 per cent. Sodium chloride and phosphate, when present to the extent of .012 per cent, were found to exercise but a very slight influence, while calcium phosphate decidedly increased the diastatic action—a result which may help explain the value of the calcium phosphate invariably present in wheat and other grains. Experiments with alkaline solutions showed that the presence of the peptones also favors the digestive process when they are in question, while inorganic salts play, as in the other instances, but an unimportant part in it.

The experiments of Messrs. Chittenden and Griswold in 1881 have appeared to show that the diastatic action of saliva was increased by the presence of very minute quantities (.005 per cent) of hydrochloric acid, but that an increase of the percentage of the acid was accompanied by a diminution of the action, till it stopped, when the amount of acid reached .025 per cent.



This conclusion has been reviewed by Messrs. Langley and Eves, of Cambridge, who suggest that no mention is made in the account of the experiments of the saliva having been neutralized before the addition of the acid; hence the office of the acid may have been simply to render an alkaline saliva neutral—a condition which is found to make the action of the ferment stronger. Their own experiments show that the action of neutralized saliva is diminished by the presence of .005 per cent of hydrochloric acid. Regarding it as an open question whether ptyalin acts best in a neutral, a faintly acid, or a faintly alkaline medium, but certain that a distinctly acid or a distinctly alkaline medium retards its action, they suggest that the cases in which the addition of minute quantities of acid have appeared to have had the stimulating effect observed may be accounted for by supposing that the acid combined with the proteids present, rather than that any free acid actually existed in the fluid. From further experiments in the action of various agents on ptyalin, they find that when saliva is neutralized and then diluted, to prevent any considerable part of the acid being taken up by the proteids, .005 per cent of hydrochloric acid produces a very destructive effect; that sodium carbonate has a very slight destructive but a powerful retarding action; and that neutralized saliva converts starch into sugar more quickly in the presence of neutral peptone than in the presence of acid, .002 per cent and upward.

THE CIRCULATION IN THE BRAIN.—Signor Mosso, who for several years past has been engaged on the study of the circulation in the brain, has lately published an account of his observations which have yielded some very interesting results. He had the rare good fortune to meet with three patients who had holes in their skulls, and was thus enabled to examine the encephalic movements dependent on the changes in the circulation within the organ. No part of the body exhibits a pulsation as varied in form as that in the brain. Signor Mosso describes it as tricuspid; that is, it consists of a strong beat preceded and followed by lesser beats. It gathers strength when the brain is at work corresponding with the more rapid flow of blood to the organ. The increase in the volume of the brain does not depend upon any change in the respiratory rhythm; for, if we take the pulse of the forearm simultaneously with that of the brain, we cannot perceive that the cerebral labor exerts any influence on the forearm, although the pulsation in the brain may be considerably modified. The emotions have a similar effect upon the circulation of the brain to that of cerebral labor. Mosso also observed and registered graphically the variations of the cerebral pulse during sleep. Generally the pulses of the wrist and of the brain vary oppositely. At the moment of waking, the pulse at the wrist diminishes, while that of the brain increases. The cerebral pulsations diminish as the sleep grows deeper,

and at last become very weak. Outward excitations determine the same modifications during sleep as in the waking state, without waking the sleeper. A deep inspiration always produces a diminution in the volume of the brain, in consequence probably of an increased flow of blood into the veins of the thoracic cavity; the increase in volume of the brain, when it takes place, is, on the contrary, due to a more abundant flow into it of arterial blood.

INFLUENCE OF THE BLOOD-CONSTITUENTS ON THE CONTRACTION OF THE VENTRICLE.—Dr. Sidney Ringer, of University College, London, has described a series of experiments made to ascertain the influence which each constituent of the blood exercises on the contraction of the ventricle. He employed, as his principal fluids, a "saline solution," or the ordinary .75 per cent solution of sodium chloride, and "blood mixture," made from dried bullock's blood dissolved in water to represent normal blood, and diluted with five parts of saline solution. When the circulating fluid consists only of "saline solution," the ventricular beats undergo a series of remarkable changes. The contraction at first becomes more complete if the ventricle empties itself imperfectly. The trace representing the beatings soon becomes broader and its summit rounder, while there is a slight diastolic contraction (persistent spasm). Next, the period of relaxation becomes greatly prolonged, and the whole trace is permanently raised higher above the base line. During these changes affecting the expansion of the ventricle the contraction is very little altered, or is rather accelerated. Next, the prolongation of the ventricular dilatation grows less, while the trace rises still higher above the base line. In a series of contractions excited after a stand-still of some fifty or sixty seconds, the first contraction dilates more rapidly than the subsequent ones. The changes in the trace increase, the amplitude and duration of each contraction grow less, and the dilatation often becomes less prolonged. At the same time the ventricle undergoes another curious change. After the contractions have become weakened, the duration of the contraction and the slowness of dilatation are influenced by the strength and duration of the stimulus. Also, if the faradaic excitations be continued till the trace has nearly completed its rise, the contraction is much prolonged. The effect of an increase in the strength or duration and number of stimuli does not occur in a heart fed with blood, nor, in the early stages, with saline. When the dilatation is greatly prolonged, in many cases it is completed at the base while the rest of the ventricle remains quite contracted, and then it extends gradually to the apex. Sometimes, before the dilatation has spread far down the ventricle, the dilated portion contracts again, and there ensues a partial fusion of the excursions in the trace; in fact, we get an imperfect tetanus, the fusion being

due not to increased frequency of the contractions, but to their great prolongation, a second contraction beginning before its predecessor is finished.

Blood and the white of egg in small quantities obviate the changes which occur with saline solution; so also does potassium chloride, in much smaller quantities than exist in serum. Phosphate of potash in smaller proportions than exist in the blood counteracts the prolonged relaxation which the solution occasions; and in general, from the tenor of Dr. Ringer's experiments with other compounds of that metal, probably any potassium salt contributes to such an effect. This is not the case with phosphate of soda, and it is hence inferred that the effect with potassium phosphate is due to the potassium, and not to the phosphoric acid. Serum albumen, free from potassium salts, has no effect upon the dilatation produced by the saline solution.

Distilled water, when introduced to the ventricle, throws it into complete and permanent systole, affecting the cardiac as it does the skeletal muscles, and inducing water rigor. This effect is renewed by adding sodium chloride to the water, while white of egg dissolved in water affects the ventricle just as the water does. Blood, however, is more efficient in restoring the contractions than simple saline solution; but if the rigor, which is in the beginning a condition closely similar to *rigor mortis*, is continued too long, it becomes a true *rigor mortis*, when the ventricle turns white and opaque, and neither sodium chloride nor blood mixture will cause a resumption of contractility. Phosphate of soda removes water rigor, chloride of potassium does not, either in physiological or toxic doses.

The saline solutions used in the preceding experiments were made with the ordinary water of the New River Water Company, and their effects were probably promoted by the impurities in that water. When distilled water was used for the solution the effects were different. An addition of one part of a 1 per cent solution of potassium chloride solution to one hundred parts of circulating saline formed an excellent artificial circulating fluid for the heart. Calcium and calcium compounds, even in minute doses, produced the formerly described changes in the ventricular beat, and their action seems to be favored by cold. Added to the saline solution, with potassium chloride, they make a good artificial circulating liquid. As this composition is neutral, the conclusion is drawn that alkalinity of the circulating fluid is not necessary for contractility. The alkaline reaction of the blood is, however, no doubt necessary, indirectly, to contractility, for muscular contractions develop acidity, which would give an acid reaction to a neutral fluid, while the heart can not contract when supplied with a circulating fluid of that character. Sodium bicarbonate added to saline solution prolongs slightly better contraction

and dilatation. All of its effects are obviated by a physiological quantity of potassium chloride.

A mixture containing a hundred parts of saline solution, five of sodium bicarbonate, five of calcium chloride solution, and one of potassium chloride, makes a circulating fluid with which the heart will continue to beat perfectly. The heart's contractility, however, can not be sustained by any combination of these solutions without the calcium salt; but the addition of a lime salt to any of the combinations will sustain contractility, and will restore it after it has ceased. It is therefore concluded that a lime salt is necessary for the maintenance of muscular contractility. Yet, while calcium salts are necessary for the proper contraction of the heart, if they are not antagonized by potassium salts the beats would become so broad and the diastolic dilatation so prolonged that much fusion of the beats would occur, and the ventricle would be thrown into a state of tetanus. Since the ventricle will continue to beat perfectly for hours without any sodium bicarbonate, it is evident that the normal trace is the result of the antagonizing action of calcium and potassium salts.

PRINCIPAL PHYSIOLOGICAL PUBLICATIONS AND MEMOIRS OF THE YEAR.—The literary work of the year in physiology includes a third edition of Professor Mapother's work, revised by Dr. Knott; a seventh edition of Dr. Dalton's work in a form which, while it is less voluminous than the previous editions, is none the less clear and precise; and a second edition of Harris & Power's "Manual for the Physiological Laboratory." In periodicals have appeared researches on "Chlorophyll," by Pringsheim and Lankester; articles on the "Lymphatic System," by Klein, and on "Saproleptia in relation to the Salmon Disease," by Walpole and Huxley; and "Notes on Echinoderm Morphology," by Herbert Carpenter, in the "Quarterly Journal of Microscopical Science"; a discussion of "The Segmental Value of the Cranial Nerves," by Dr. Milnes Marshall, and a description of the "Cerebral Sinuses and their Variations," by Mr. J. F. Knott, in the "Journal of Anatomy and Physiology"; and papers by Martin and Sedgwick on "The Mean Pressure and the Characters of the Pulse Wave in the Coronary Arteries of the Heart," and by C. S. Roy on "Rhythmical Contractions of the Spleen Independent of Cardiac Movements," in the "Journal of Physiology."

In Continental literature, Georges Hayem's "Leçons sur les Modifications du Sang" give the results of careful investigations of the changes presented by the blood under the influence of various remedies and therapeutic agents. Malassez has specially discussed the development of the red corpuscles in the medulla of the bones, and Marjet the spontaneous changes undergone by the colored corpuscles preserved in plasma without access of air. Alexander Schmidt has given in Brown-Sé-



guard's "Archives" a summary of researches on the physiological and pathological action of the leucocytes of the blood, in which he continues to maintain that the white corpuscles contain a ferment which plays an important part in the act of coagulation. Investigations of the bodies called hæmatoblasts and the transparent corpuscles have been made by Cadet, Bizzozero, Hart, and others; and Bizzozero has suggested an instrument for the optical estimation of the quality of blood. Observations made by Vignol, in Ranvier's laboratory, indicate that in the lower vertebrates the heart possesses a local motor and a local inhibitory center. Duclaux has written a work on ferments and their relation to disease. MM. Dastre and Morat have considered the subject of the dilatation of the blood-vessels under the influence of the nervous system, and conclude that it is, in most instances, of a reflex character. Dubar and Remy have studied the phenomena of absorption by the peritoneum; Langley has worked out, with much success, the histology of the mammalian gastric gland, and the relation of pepsin to the granules of the chief cells. Honigsberg has compared the digestibility of meat, in various conditions, in artificial gastric juice, with conclusions decidedly in favor of the superior digestibility of roast meat. Vella has, by means of intestinal fistula and the subcutaneous injection of pilocarpine, provoked the secretion of intestinal juice, with which he has emulsified fats, converted cane-sugar into grape-sugar, and digested proteids, and established an important difference in its action on muscle from that of gastric juice. Goultz has made some interesting researches into the effects of serious injuries upon the vertex convolutions, and on the occipital lobes of the brains of dogs. Merschewski has investigated the functions of the olivary bodies of the medulla oblongata, which he believes to stand in close relations with the functions of the cerebellum. Hippolyte Martin has drawn interesting conclusions from the investigation of the structure of muscular tissue. Eulenberg has determined the duration of the latent period of the "tendon reflex" in the healthy adult to be, with but little variation,  $\frac{1}{10}$  of a second. He regards it as something more than a mere reflex phenomenon, and endeavors to prove that it is of a complex nature, while Dr. Watterville is disposed to regard it as a direct contraction. M. Richet has published a very complete treatise on the physiology of the muscles and nerves, in which the chief facts now known in regard to the important lesions of these organs are clearly given.

PIERPONT, Hon. JOHN, Chief-Justice of the Supreme Court of Vermont, died at his home at Vergennes, in that State, on the 6th of January. He was born in Litchfield, Conn., September 10, 1806, and was descended from the Pierreponts and Edwardses of colonial times. He began the study of law at the age of eight-

een, in the office of Judge Gould, and three years afterward began its practice with his brother Robert in Rutland, Vt. He subsequently removed to Pittsfield, and finally located in Vergennes in 1832, where he married, in 1838, a daughter of General Viley Lawrence, of that place. In 1841 he was representative of his town in the State Legislature, and was State Senator from Addison County in 1855-'57. He was elected Fourth Associate Judge of the Supreme Court of the State in 1857, and was advanced to the chief justiceship in 1865, which position he held until his death. Judge Pierpont's health had been failing for a year or so, his death being the result of a general breaking down of the system, rather than to any special disease. Judge Pierpont had two sons, one of whom died some years since, shortly after his removal to Chicago. The other son, Henry, married the adopted daughter of Hon. David Davis, of Illinois, and lives in the same city, as does also one of the daughters of the deceased. The other daughter and widow of Judge Pierpont reside in Vergennes.

**POLITICAL ASSESSMENTS.** This was the subject of an unusual amount of public discussion during the year, caused chiefly by the action of the Republican Congressional Committee in calling upon officers, clerks, and others, in the service of the Federal Government, to contribute two per cent of their salaries for election purposes. Representative Jay A. Hubbell, of Michigan, was the chairman of this committee, and D. B. Henderson secretary. The Executive Committee consisted of Senators Allison, Hale, and Aldrich, and Representatives Robeson, Hiscock, McKinley, Davis, of Illinois, Fisher, Page, Calkins, Ryan, Hubbs, Van Horn, and Houk. In May the committee began sending Government employes a circular, of which the following is a copy (see CONGRESS, UNITED STATES, page 151):

HEADQUARTERS REPUBLICAN CONGRESSIONAL COMMITTEE,  
No. 520 THIRTEENTH STREET, NORTHWEST,  
WASHINGTON, D. C., May 15, 1883.

(Here follow the names of the chairman, secretary, and Executive Committee.)

SIR: This committee is organized for the protection of the interests of the Republican party in each of the congressional districts of the Union. In order that it may prepare, print, and circulate suitable documents, illustrating the issues which distinguish the Republican party from any other, and may meet all proper expenses incident to the campaign, the committee feel authorized to apply to all citizens whose principles or interests are involved in the struggle. Under the circumstances in which the committee finds itself placed, the committee believes that you will esteem it both a privilege and a pleasure to make to its fund a contribution, which it is hoped will not be less than \$—.

The committee is authorized to state that such voluntary contribution from persons employed in the service of the United States will not be objected to in any official quarter. The labors of the committee will affect the result of the presidential election in 1884, as well as the congressional struggle, and it may therefore reasonably hope to have the sympathy and assistance of all who look with dread upon the possibility of the restoration of the Democratic party to the control of the Government.

Please make prompt and favorable response to this letter by bank-check, draft, or postal order, payable to the order of Jay A. Hubbell, acting treasurer, post-office box 589, Washington, D. C.

By order of the committee:

D. B. HENDERSON, Secretary.

This action of the Congressional Committee held the New York Civil-Service Reform Association to send to Government employes a communication, of which the following is a copy:

CIVIL-SERVICE REFORM ASSOCIATION,

No. 4 PINE STREET, NEW YORK, June 17, 1882.

DEAR SIR: We understand that a circular has recently been sent to you from the Republican Congressional Committee, asking for contributions toward defraying the expenses of that committee at the coming election.

We desire to inform you that in the opinion of counsel, as the members of the committee are officers of the United States Government, you, as an officeholder, are liable, under section 6 of chapter 289 of the United States Statutes, 1876 (supplement to the Revised Statutes, page 245), to punishment by fine, or removal from office, or both, in case you subscribe, as desired. The National Civil-Service Reform League proposes to bring the matter to the attention of the Attorney-General, and other prosecuting officers of the United States, and until their decision is given we should advise you prudently to refrain from complying with the request of the committee. Respectfully,

GEORGE WILLIAM CURTIS, President.

EVERETT P. WHEELER,

Chairman Executive Committee.

WILLIAM POTTS, Secretary for the New York Civil-Service Reform Association.

The question whether a member of Congress incurred the penalties of the act of 1876 by soliciting or receiving money for political purposes from Government employes, was submitted to Attorney-General Brewster, who gave an opinion to the effect that neither a Senator nor a Representative was an "officer" within the meaning of that statute. In August a second circular, of which the following is a copy, was sent by the Congressional Committee to those persons in the Government service who had not responded to the first:

WASHINGTON, D. C., August 15, 1882.

SIR: Your failure to respond to the circular of May 15, 1882, sent to you by this committee, is noted with surprise. It is hoped that the only reason for such failure is that the matter escaped your attention, owing to the press of other cares.

Great political battles can not be won in this way. This committee can not hope to succeed in the pending struggle, if those most directly benefited by success are unwilling or neglect to aid in a substantial manner.

We are on the skirmish-line of 1884, with a conflict before us, this fall, of great moment to the republic, and you must know that a repulse now is full of danger to the next presidential campaign.

Unless you think that our grand old party ought not to succeed, help it now in its struggle to build up a new South, in which there shall be, as in the North, a free ballot and a fair count, and to maintain such hold in the North as shall insure good government to the country.

It is hoped that by return mail you will send a voluntary contribution, equal to two per cent of your annual compensation, as a substantial proof of your earnest desire for the success of the Republican party this fall, transmitting by draft or postal money-order, payable to the order of Jay A. Hubbell, acting treasurer, post-office lock-box 589, Washington, D. C.

By order of the committee:

D. HENDERSON, Secretary.

The levying of these political assessments or contributions was generally condemned by the press of both parties, as well as independent newspapers.

Meanwhile a case had been begun against General Newton Martin Curtis, which resulted in a decision by the United States Supreme Court on the question of the constitutionality of the act of 1876. General Curtis was a Federal officer in New York city, appointed by the Treasury Department. He was also Treasurer of the New York Republican State Committee, and in that capacity was charged with receiving money from Government employes who had been asked to contribute for political purposes by that committee. At the instance of the New York Civil-Service Reform Association, General Curtis was indicted under the act of 1876, tried in the Circuit Court of the United States, found guilty on two counts of the indictment, and sentenced to pay a fine of \$500 on each, or \$1,000 in all. His counsel contended that Congress had no power to pass the act under which he was indicted, and that therefore it was unconstitutional and void. The Circuit Court affirmed the constitutionality of the law, and the case was brought before the Supreme Court on a writ of *habeas corpus*.

The act of 1876 is as follows:

That all executive officers or employes of the United States, not appointed by the President, with the advice and consent of the Senate, are prohibited from requesting, giving to, or receiving from any other officer or employe of the Government, any money or property, or other thing of value, for political purposes;

And any such officer or employe who shall offend against the provision of this section shall be at once discharged from the service of the United States;

And he shall also be deemed guilty of a misdemeanor, and on conviction thereof shall be fined in a sum not exceeding five hundred dollars.

On December 18, 1882, the Supreme Court rendered a decision holding the act constitutional. In the opinion, written by Chief-Justice Waite, it is pointed out that the above act rests on the same principle as that originally passed in 1789, making it unlawful for certain officers of the Treasury Department to engage in trade or commerce, to own a vessel, to buy public lands or other public property, or to be concerned in the purchase or disposal of the public securities of a State or of the United States; and that passed in 1812, which makes it unlawful for a judge appointed under the authority of the United States to engage in the practice of the law; and that passed in 1853, which prohibits every officer of the United States from acting as an agent or attorney for the prosecution of any claim against the United States; and that passed in 1863, prohibiting members of Congress from practicing in the Court of Claims; and that passed in 1867, requiring the dismissal of any officer or employe of the Government who requests any working-man in a navy-yard to contribute or pay any money for political purposes; and that passed in 1868, prohibiting members of Congress from



being interested in contracts with the United States; and that passed in 1870, which provides that no officer, clerk, or employé in the Government service shall solicit contributions from other officers, clerks, or employés for a gift to those in a superior official position, and that no officers or clerical superiors shall receive gifts from their subordinates. After remarking that many other acts of a kindred character might be referred to, Chief-Justice Waite said:

The evident purpose of Congress in all this class of enactments has been to promote efficiency and integrity in the discharge of official duties and to maintain proper discipline in the public service. Clearly such a purpose is within the just scope of legislative power, and it is not easy to see why the act now under consideration does not come fairly within the legitimate means to such an end. It is true, as is claimed by the counsel for the petitioner, political assessments upon office-holders are not prohibited. The managers of political campaigns not in the employ of the United States are just as free now to call on those in office for money to be used for political purposes as ever they were, and those in office can contribute as liberally as they please, provided their payments are not made to any of the prohibited officers or employés. What we are now considering is not whether Congress has gone as far as it may, but whether that which has been done is within the constitutional limits upon its legislative discretion.

A feeling of independence under the law conduces to faithful public service, and nothing tends more to take away this feeling than a dread of dismissal. If contributions from those in public employment may be solicited by others in official authority, it is easy to see that what begins as a request may end as a demand, and that a failure to meet the demand may be treated by those having the power of removal as a breach of some supposed duty growing out of the political relations of the parties. Contributions secured under such circumstances will quite as likely be made to avoid the consequences of the personal displeasure of a superior as to promote the political views of the contributor—to avoid a discharge from service, not to exercise a political privilege. The law contemplates no restrictions upon either giving or receiving, except so far as may be necessary to protect, in some degree, those in the public service against exactions through fear of personal loss. . . .

If there were no other reasons for legislation of this character than such as relate to the protection of those in the public service against unjust exactions, its constitutionality would, in our opinion, be clear; but there are others to our minds equally good. If persons in public employ may be called on by those in authority to contribute from their personal income to the expenses of political campaigns, and a refusal may lead to putting good men out of the service, liberal payments may be made the ground for keeping poor ones in. So, too, if a part of the compensation received for public services must be contributed for political purposes, it is easy to see that an increase of compensation may be required to provide the means to make the contribution, and that in this way the Government itself may be made to furnish indirectly the money to defray the expenses of keeping the political party in power that happens to have for the time being the control of the public patronage. Political parties must almost necessarily exist under a republican form of government, and, when public employment depends to any considerable extent on party success, those in office will naturally be desirous of keeping the party to which they belong in power. The statute we are now considering does not interfere with this. The apparent end of Congress will be accomplished if it prevents those in power from requir-

ing help for such purposes as a condition to continued employment.

Justice Bradley dissented from the opinion of the court.

In his annual message to Congress in December, President Arthur referred to the subject of political assessments in the following language:

I declare my approval of such legislation as may be found necessary for supplementing the existing provisions of law in relation to political assessments.

In July last I authorized a public announcement that employés of the Government should regard themselves as at liberty to exercise their pleasure in making or refusing to make political contributions, and that their action in that regard would in no manner affect their official status.

In this announcement I acted upon the view which I had always maintained and still maintain, that a public officer should be as absolutely free as any other citizen to give or to withhold a contribution for the aid of the political party of his choice. It has, however, been urged, and doubtless not without foundation in fact, that by solicitation of official superiors and by other modes such contributions have at times been obtained from persons whose only motive for giving has been the fear of what might befall them if they refused. It goes without saying that such contributions are not voluntary, and in my judgment their collection should be prohibited by law. A bill which will effectually suppress them will receive my cordial approval.

Early in January, 1883, the President signed the Civil-Service Reform bill, which contains the following provisions relating to political assessments:

SECTION 11. That no Senator or Representative or Territorial Delegate of the Congress, or Senator, Representative, or Delegate elect, or any officer or employé of either of said Houses, and no executive, judicial, military, or naval officer of the United States, and no clerk or employé of any department, branch, or bureau of the executive, judicial, or military or naval service of the United States shall, directly or indirectly, solicit or receive, or be in any manner concerned in soliciting or receiving, any assessment, subscription, or contribution for any political purpose whatever, from any officer, clerk, or employé of the United States, or any Department, branch, or bureau thereof, or from any person receiving any salary or compensation from moneys derived from the Treasury of the United States.

SEC. 12. That no person shall, in any room or building occupied in the discharge of official duties by any officer or employé of the United States mentioned in this act, or in any navy-yard, fort, or arsenal, solicit in any manner whatever, or receive any contribution of money or any other thing of value for any political purpose whatever.

SEC. 13. No officer or employé of the United States mentioned in this act shall discharge, or promote, or degrade, or in any manner change the official rank or compensation of any other officer or employé, or promise or threaten so to do, for giving or withholding or neglecting to make any contribution of money or other valuable thing for any political purpose.

SEC. 14. That no officer, clerk, or other person in the service of the United States shall, directly or indirectly, give or hand over to any other officer, clerk, or person in the service of the United States, or to any Senator or member of the House of Representatives, or Territorial Delegate, any money or other valuable thing on account of or to be applied to the promotion of any political object whatever.

SEC. 15. That any person who shall be guilty of violating any provision of the four foregoing sections



shall be deemed guilty of a misdemeanor, and shall, on conviction thereof, be punished by a fine not exceeding \$5,000, or by imprisonment for a term not exceeding three years, or by such fine and imprisonment both, in the discretion of the court.

**PORTUGAL**, a monarchy in the south of Europe. The Constitution accorded by Dom Pedro IV, in 1826, was revised by the Cortes in 1852. The legislative power resides in the Cortes, which consists of two Chambers. The Chamber of Peers numbers about 150 members, nominated for life by the King. The Chamber of Deputies has numbered, since 1878, 149 members, who are elected by the people. The hereditary peerage was abolished in 1864. The number of peers whom the sovereign can appoint is not limited. The possession of an academical degree and an income equal to \$1,500 confers eligibility. The franchise is limited to citizens having a clear income of \$107. The Cortes meet and separate at fixed dates. The King has no veto on legislation. All laws concerning the army and general taxation must originate in the Chamber of Deputies.

The King, Luis I, born October 31, 1838, was the son of Maria II and Prince Ferdinand of Saxe-Coburg. He has two sons, Carlos, born in 1863, and Affonso, born in 1865. He succeeded his brother, Pedro V, November 11, 1861.

The executive authority is exercised in the name of the King by a Cabinet divided into seven departments and responsible to the Cortes. The ministry formed November 16, 1881, is composed as follows: President of the Council and Minister of Finance, A. M. de Fontes Pereira de Mello; Minister of the Interior, T. Ribeiro da Fonseca; Minister of Justice and Worship, Dr. J. Marques de Villena; Minister of War *ad interim*, General A. M. Fontes Pereira de Mello; Minister of Marine and the Colonies, J. de Mello Gouvea; Minister of Foreign Affairs, A. de Serpa Pimentel; Minister of Public Works, Commerce, and Industry, Dr. E. R. Hintz Ribeiro.

**AREA AND POPULATION.**—Portugal contains 36,510 square miles, not including the Azores, with an area of 966, and Madeira and Porto Santo, with 317 square miles, which islands form an integral part of the kingdom. The population of continental Portugal, according to the census of January 1, 1878, was 4,160,315 against 3,996,163 in 1868; the population of the Azores in 1878, 259,800; of Madeira, 130,584; total population of the kingdom, 4,550,699. Of this total, 2,175,829 were of the male and 2,374,870 of the female sex. The density of population was 127 to the square mile. The only towns of over 20,000 inhabitants were the capital, Lisbon, with a population of 246,343 (including the suburbs of Belem, population 30,029, and Olivaes, population 28,910), and the seaport Oporto, with 105,838 inhabitants.

**COLONIES.**—The colonial possessions of Portugal have an aggregate area of about 694,400

square miles, and an aggregate population estimated at 3,333,700. Of this number 2,000,000 are the estimated population of the Angola possessions in Africa, about 311,000 square miles in extent; 350,000 the estimated population of the Mozambique possessions, 381,000 square miles in extent; and 300,000 that of Timor, 6,200 miles in area. The Cape Verd Islands contained, in 1879, 99,317 inhabitants, area 148 square miles; St. Thomas and Prince's Islands, in 1881, 21,037, area 415 square miles; town of Macao, in China, in 1880, 59,959; Goa and dependencies, in 1881, 419,993, area 1,250 square miles; Daman and its district, 48,838, in 1881, area 30 square miles; and Diu, in 1881, 12,636.

**COMMERCE.**—The largest share of the commerce of Portugal is with England, to which it ships wine of about the average value of \$5,000,000 a year, and from which it receives cotton goods of four fifths that value, and which with the iron and woolen goods more than balance the account. The total commerce in 1880 amounted to 34,948,000 milreis of merchandise imports and 24,716,000 milreis of exports. (The milreis or 1,000 reis is a gold coin which was equal in value to the old Mexican dollar, about \$1.08.) There were cereals imported of the value of 6,000,000 milreis, textile fabrics of the value of 5,738,000 milreis, metals of the value of 4,544,000 milreis, animal food products of the value of 4,511,000 milreis, and tropical products of the value of 3,258,000 milreis. The chief exports were wines of the value of 9,693,000 milreis, animal food products of the value of 3,440,000 milreis, woods of the value of 3,165,000 milreis, and fruits, etc., of the value of 2,856,000 milreis. Of the total imports of 1880, 15,233,000 milreis came from Great Britain, 5,298,000 milreis from the United States, and 4,140,000 milreis from France; of the exports, 10,783,000 milreis went to Great Britain and 5,964,000 milreis to Brazil.

The total commerce of 1881 was much smaller, the imports amounting to 23,601,000 milreis and the exports to 13,568,000 milreis. The imports of 1882 amounted to 24,875,000 and the exports to 17,488,000 milreis.

The merchant navy numbered, in 1881, 41 steamers and 412 sailing-vessels. The number of vessels entering Portuguese ports in 1880, including coast-traders, was 7,331 sail-ships and 3,278 steamers. Somewhat less than 24 per cent of the tonnage was Portuguese.

The length of railroads in operation in October, 1882, was 1,045 miles. The length of the state telegraph lines at the end of 1880 was 2,730 miles, of wires 6,805 miles. The number of paid dispatches was 633,219, of which 379,802 were domestic, 139,301 foreign, and 114,116 in transit. The receipts were 247,463 milreis against 336,015 in 1879. The total number of letters, papers, and postal-cards forwarded by the post in 1881 was 35,677,441, including 14,600,096 domestic letters, 9,409,208 newspa-



pers, and 792,972 postal-cards, and 3,499,133 foreign letters and postal-cards received and dispatched. The receipts were, in 1879-'80, 495,060 milreis.

**ARMY AND NAVY.**—The army is recruited partly by conscription under the law of 1864, introducing obligatory military service; but about one half the standing army is composed of enlisted volunteers. One half the conscripts are not required to receive instructions. The half who enter the army for the three years of active service are chosen by a second drawing of lots among the total number conscripted. The effective annual recruit averages about 10,000. Immunity from conscription is purchasable for about \$200. The active army in 1882 numbered nominally 1,643 officers and 33,231 men on the peace footing, and 2,688 officers and 75,336 men on the war footing. There were in actual service on the 31st of July, 2,097 officers and 28,156 men, including 2,617 men on leave of absence.

The navy in 1882 consisted of one ironclad corvette, 7 other corvettes, 9 gunboats, 2 torpedo-boats, and 12 other steamers, besides 16 sailing-vessels. It was manned by 280 officers and 3,034 seamen.

**FINANCES.**—The average revenues for the last ten years have amounted to about \$25,000,000, and the average expenditures to about \$3,750,000 more. The total revenue in 1878-'79 was 28,944,484 milreis and the total expenditures were 34,118,700, of which 10,723,928 milreis were paid on the public debt, 7,167,885 for public works, and 16,226,887 for ordinary expenses. The estimated revenue for 1882-'83 is 29,654,012 milreis, of which 6,066,630 milreis are derived from direct taxes, 15,210,770 from indirect, and 2,578,234 from the railroads, posts, and other public property and enterprises. The estimated expenditures are 35,276,211 milreis, of which 13,089,321 are for the public debt; 5,763,870 for the civil list, pensions, interest, and capital payments on temporary debt, and financial administration; 2,161,149 for public instruction, charities, public safety, subventions to municipalities, and other expenses in charge of the Ministry of the Interior; 627,372 for the Ministry of Worship and Justice; 4,599,930 for the Ministry of War; 1,663,721 for the Ministry of Marine and the Colonies; 303,486 for the Ministry of Foreign Affairs; 2,727,084 for the Ministry of Public Works; and 4,335,278 for outlay on public works, constituting the extraordinary expenditure.

The colonial budgets for 1882-'83 show 2,388,445 milreis of aggregate receipts, and 2,579,146 of expenditures.

The public debt on June 30, 1881, amounted to 430,879,399 milreis, of which 232,929,349 milreis formed the domestic debt, newly funded at 3 per cent, and 197,950,050 milreis the foreign debt, contracted in England. For over thirty years there has been no budget without a deficit. The funded debt in July, 1880,

amounted to 391,667,650 milreis. In December of that year a new foreign loan of £4,000,000 sterling was added. The interest on the debt is never fully paid. The foreign 3 per cent loans were issued at 50 per cent of their face value. In 1852 the interest on the debt, amounting then to nearly \$100,000,000, was arbitrarily reduced to 3 per cent. In 1873 the floating debt was funded by the issue of a loan of \$42,500,000 of 3 per cent bonds at 43½ per cent; but it has continued since to accumulate.

**LEGISLATION.**—In the royal speech at the opening of the Cortes on January 2d, new measures for the development of primary and secondary education, army and navy reforms, the building of railroads and highways, for establishing a financial equilibrium, and a new commercial treaty with France were announced. Although the legal period of the session was prolonged eight times and the Cortes sat one hundred and ninety-nine days, many of the measures introduced had to be postponed. The commercial convention with France was approved. A syndicate which undertakes the construction of a railroad from Salamanca, in Spain, to Oporto and Beira Alta was guaranteed 5 per cent interest, in spite of a violent opposition.

**POLITICS.**—The Government continues to restrain its vigorous opponents by force, breaking up public meetings which discuss its policy with hostility. In the latter part of 1882 the anarchistic form of socialism, propounded by the Russian, Bakunin, which has many adherents in Southern Europe, particularly in Spain, began to manifest itself in the formation of secret societies and revolutionary conspiracies.

**POTTER, CLARKSON N.**, lawyer, born at Schenectady, N. Y., in 1824; died January 23, 1882, at his home in New York city. Mr. Potter was of Quaker descent; his ancestors in this country settling at Warwick Neck, R. I., in 1640. His grandfather was Joseph Potter, who represented Dutchess County, N. Y., in the Legislature shortly after the Revolution, and his father Alonzo Potter, Bishop of Pennsylvania. On his mother's side he was descended from the distinguished Eliphalet Nott, for a long time president of Union College, who preached the celebrated funeral sermon over Alexander Hamilton. Mr. Potter was graduated from Union College in 1842, and afterward studied civil engineering at the Rensselaer Institute. In 1843 he went to Milwaukee, Wis., then a small village, where he was employed for a time by the postmaster. He afterward found employment as an engineer, and at the same time studied law, and in 1848 began the practice of this profession in his native State, which he continued until 1859, gaining a high reputation. In this year he retired, his brother, Robert B., succeeding him. On the breaking out of the rebellion his brother enlisted, and Mr. Potter resumed his practice at the bar. In 1868 he was elected to Congress from the Twelfth Dis-

trict of New York as a Democrat, where he soon gained distinction. In this first term he served upon the Committees of Private Land Claims, of Commerce, and of Elections. He was re-elected in 1870, and served upon the Judiciary Committee. He was President of the Democratic State Convention in 1871, and was elected delegate to the Democratic National Convention in the following year. He opposed the nomination of Horace Greeley in this convention, but, as is usual, did his utmost for his election when nominated. He was re-elected to the Forty-third Congress, and served again upon the Judiciary Committee and upon a special committee on the South, appointed to investigate certain election frauds in Louisiana, on which Mr. Potter rendered valuable service. In 1875 he reported, from the Judiciary Committee, a resolution with reference to the presidency, proposing that the term of office be six instead of four years, and that both the President and Vice-President be ineligible for reelection. Mr. Potter declined a nomination to the Forty-fourth Congress, but was elected to the Forty-fifth, as also to the Forty-sixth. He took a prominent part in the discussions relative to the disputed electoral votes of the States of Florida and Louisiana, in the presidential election of 1876, which question was finally settled, as is well known, by the appointment of the Electoral Commission, which decided in favor of Hayes. Toward the close of the session of the Forty-sixth Congress, Mr. Potter moved for the appointment of a select committee to inquire into these same frauds, which was done. Mr. Potter's congressional life ended with this Congress, though he was urged to accept a nomination to the Forty-seventh. In 1879 he received the Democratic nomination for Lieutenant-Governor of New York, but failed of election, though the contest was so close that it was at first supposed he was elected. The following year he went abroad, making quite an extended tour. Since then, until the time of his death, he was engaged in the practice of his profession. His death was quite unexpected, he being taken suddenly sick in court while speaking upon a railroad bond case before the Court of Appeals, at Albany. The immediate cause of death was an acute attack of Bright's disease.

**POWER OF CONGRESS OVER WITNESSES.** The important question as to the power of Congress to compel witnesses who are not members to testify before one of its committees, and to punish for contempt in case of refusal, was raised in April by the refusal of Jacob R. Shipherd to disclose the names of the stockholders in the Peruvian company, and to answer other questions put to him by the committee of the House, directed to inquire into the course of this Government toward Chili and Peru when Mr. Blaine was Secretary of State. In view of the decision rendered early in 1881 by the United States Supreme Court in the Kilbourn case, the committee did not un-

dertake to compel Mr. Shipherd to testify as to the facts which he declined to disclose. In that case the powers of Congress over witnesses were elaborately discussed by the Supreme Court. It appeared that in January, 1876, the House of Representatives passed a resolution which, after reciting that the Government of the United States was a creditor of Jay Cooke & Co., then in bankruptcy, and that that firm had had a large and valuable interest in "the matter known as the real-estate pool" in the District of Columbia, provided for the appointment of a special committee of five to investigate the affairs of the "real-estate pool." Hallet Kilbourn was summoned to appear before this committee, and to bring with him certain records, papers, and maps relating to the subject-matter of the investigation. He appeared, but refused to produce the books and papers called for, and also to answer the questions put to him. He was thereupon adjudged guilty of contempt of the authority of the House, and by order of the House was arrested and sent to jail, where, in consequence of his refusal to testify as required, he was kept forty-five days, at the expiration of which he was released by a writ of *habeas corpus* granted by the Chief-Justice of the Supreme Court of the District of Columbia. Kilbourn then brought an action for false imprisonment against Speaker Kerr, John G. Thompson, the Sergeant-at-Arms, who had made the arrest, and the members of the House who constituted the special committee. Mr. Kerr died before the service of process, and the action abated as to him. Thompson pleaded that in making the arrest he had acted as Sergeant-at-Arms of the House and by its orders. The other defendants alleged that they were members of the House, and maintained that the order of arrest was an exercise of lawful authority. The plaintiff demurred to these pleas, and the demurrer being overruled, judgment was rendered for the defendants. An appeal was then taken to the United States Supreme Court. The issue thus joined raised the question as to the powers of the House over witnesses who were not members. On the part of the plaintiff it was contended that the House of Representatives had no power whatever to punish for a contempt of its authority. The defendants, on the other hand, maintained that such power undoubtedly existed, and when the House had formally exercised it, it was to be presumed that it had been rightfully exercised. An elaborate opinion on the subject was delivered by Justice Miller, and concurred in by all the other justices.

The Court pointed out that the power of Congress itself, when acting through the concurrence of both branches, is a power dependent solely on the Constitution. Neither branch, when acting separately, can lawfully exercise more power than is conferred by the Constitution on the whole body, except in the few instances where authority is conferred on



either House separately, as in the case of impeachments. The Constitution grants to Congress no general power of inflicting punishment. It authorizes each House to punish its own members for disorderly behavior (Article I, section 15, clause 3). And in the clause preceding it is said that they "may be authorized to compel the attendance of absent members, in such manner and under such penalties as each House may provide." There is, however, no express power conferred on either House to punish for contempt.

The advocates of the power argued in favor of its implied existence on the ground of its exercise by the British House of Commons, from which, it was said, we derived our system of parliamentary law. The Supreme Court pointed out that the House of Commons was anciently clothed with judicial functions, and that by virtue of this fact it still retains, like any other court, the power to punish for a contempt of its authority. For that reason this power of the English Commons rests on principles which have no application to other legislative bodies, and certainly can have none to the House of Representatives of the United States—a body which is in no sense a court, which exercises no functions derived from its once having been a part of the highest court of the realm, and whose functions, so far as they partake in any degree of that character, are limited to punishing its own members and determining their election. "We are of opinion," said the Court, "that the right of the House of Representatives to punish the citizen for a contempt of its authority can derive no support from the precedents and practices of the English Parliament, nor the adjudged cases in which the English courts have upheld these practices." The Court then proceeded to indicate what powers may be exercised by Congress, as follows:

As we have already said, the Constitution expressly empowers each House to punish its own members for disorderly behavior. We see no reason to doubt that this punishment may in a proper case be imprisonment, and that it may be for refusal to obey some rule on that subject made by the House for the preservation of order.

So also, the *penalty* which each House is authorized to inflict in order to compel the attendance of absent members may be imprisonment, and this may be for a violation of some order or standing rule on that subject.

Each House is by the Constitution made the judge of the election and qualification of its members. In deciding on these, it has an undoubted right to examine witnesses and inspect papers, subject to the usual rights of witnesses in such cases; and it may be that a witness would be subject to like punishment at the hands of the body engaged in trying a contested election, for refusing to testify, that he would if the case were pending before a court of judicature.

The House of Representatives has the sole right to impeach officers of the Government, and the Senate to try them. Where the question of such impeachment is before either body, acting in its appropriate sphere on that subject, we see no reason to doubt the right to compel the attendance of witnesses, and their answer to proper questions, in the same manner and by use of the same means that courts of justice can in like cases.

Whether the power of punishment in either House by fine or imprisonment goes beyond this or not, we are sure that no person can be punished for contumacy as a witness before either House, unless his testimony is required in a matter into which that House has jurisdiction to inquire, and we feel equally sure that neither of these bodies possesses the general power of making inquiry into the private affairs of the citizen. . . .

In looking to the preamble and resolution under which the committee acted, before which Mr. Kilbourn refused to testify, we are of opinion that the House of Representatives not only exceeded the limit of its own authority, but assumed a power which could only be properly exercised by another branch of the Government, because the power was in its nature clearly judicial. . . .

What was this committee charged to do? To inquire into the nature and history of the real-estate pool. How indefinite! What was the real-estate pool? Is it charged with any crime or offense? If so, the courts alone can punish the members of it. Is it charged with a fraud against the Government? Here, again, the courts, and they alone, can afford a remedy. Was it a corporation whose powers Congress could repeal? There is no suggestion of the kind. The word "pool," in the sense here used, is of modern date, and may not be well understood; but, in this case, it means no more than that certain individuals are engaged in dealing in real estate as a commodity of traffic, and the gravamen of the whole proceeding is that a debtor of the United States may be found to have an interest in the pool. Can the rights of the pool, or of its members, and the rights of the debtor, and of the creditor of the debtor, be determined by the report of a committee, or by an act of Congress? If they can not, what authority has the House to enter upon this investigation into the private affairs of individuals who held no office under the Government?

The Court held that Sergeant-at-Arms Thompson was liable to suit for false imprisonment. But the other defendants were members of the House, and for that reason their case raised another important question. The Constitution declares that Senators and Representatives "shall, in all cases, except treason, felony, and breach of the peace, be privileged from arrest during their attendance at the session of their respective Houses, and in going to and returning from the same; and for any speech or debate in either House, they shall not be questioned in any other place." After citing this clause, Justice Miller said: "Is what the defendants did in the matter in hand covered by this provision? Is a resolution offered by a member, speech, or debate, within the meaning of the clause? Does its protection extend to the report which they made to the House of Kilbourn's delinquency? To the expression of opinion that he was in contempt of the authority of the House? To their vote in favor of the resolution under which he was imprisoned? If these questions be answered in the affirmative, they can not be brought in question for their action in a court of justice, or in any other place. And yet, if a report, or a resolution, or a vote, is not speech or debate, of what value is the constitutional protection? . . . It would be a narrow view of the constitutional provision to limit it to words spoken in debate. The reason of the rule is as forcible in its application to written reports

presented in that body by its committees to resolutions offered, which, though in writing, must be reproduced in speech, and to the act of voting, whether it is done vocally or by passing between the tellers; in short, to things generally done in a session of the House by one of its members in relation to the business before it. . . .

"It is not necessary," concluded the Court, "to decide here that there may not be things done in the one House or the other of an extraordinary character for which the members who take part in the act may be held legally responsible. If we could suppose the members of these bodies so far to forget their high functions, and the noble instrument under which they act, as to imitate the Long Parliament in the execution of the chief magistrate of the nation, or to follow the example of the French Assembly in assuming the function of a court for capital punishment, we are not prepared to say that such an utter perversion of their powers to a criminal purpose would be screened from punishment by the constitutional provision for the freedom of debate. In this, as in other matters which have been pressed on our attention, we prefer to decide only what is necessary to the case in hand; and we think the plea set up by those of the defendants who were members of the House is a good defense, and the judgment of the court overruling the demurrer to it, and giving judgment for those defendants, is affirmed. As to Thompson, the judgment is reversed, and the case remanded for further proceedings."

Mr. Kilbourn prosecuted his suit against Sergeant-at-Arms Thompson, and in April, 1882, recovered a verdict of \$100,000 damages. This, however, was soon set aside by the court on the ground of excessive damages. (See DISCIPLINARY POWER OF LEGISLATIVE ASSEMBLIES OVER THEIR MEMBERS.)

**PRESBYTERIANS. I. PRESBYTERIAN CHURCH IN THE UNITED STATES OF AMERICA.**—A general summary of the statistics of this Church, as published in connection with the "Journal" of the proceedings of the General Assembly for 1882, is given in the table in the next column. The statistics for 1881 are added for comparison.

The condition of the benevolent enterprises of the Church was represented in the reports made by the board having them in charge to the General Assembly in May, the principal items of which may be summarized as follows:

**Board of Ministerial Relief.**—Contributions, \$116,347; permanent fund, \$277,256. Four hundred and sixty-six cases had been assisted during the year.

**Board of Publication.**—Total receipts, \$270,530, of which \$222,046 were in the publishing department, and \$48,484 were in the missionary department. Fifty-four missionaries had been employed, and had assisted 997 schools and organized 78 new ones. The board closed the year with a balance of \$38,586. The Assembly

SYNODS, ETC.	1881.	1882.
Synods.....	85	93
Presbyteries.....	177	180
Candidates.....	622	599
Licentiates.....	301	301
Ministers.....	5,086	5,145
Elders.....	16,501	18,554
Deacons.....	4,596	5,648
Churches.....	5,598	5,744
Added on examination.....	25,344	29,389
Communiants.....	551,401	592,128
Baptisms: Adults.....	8,174	9,678
Infants.....	17,489	19,026
Sunday-school membership.....	683,564	654,051
CONTRIBUTIONS.		
Home missions.....	\$458,008	\$467,625
Foreign missions.....	475,626	465,219
Education.....	190,799	142,970
Publication.....	33,015	43,609
Church erection.....	158,281	135,620
Relief fund.....	68,454	66,022
Freedmen.....	69,097	70,332
Sustentation.....	21,570	20,697
General Assembly.....	49,028	44,258
Congregational.....	6,388,579	6,562,640
Miscellaneous.....	517,744	929,910
Total.....	\$3,674,291	\$9,249,397

made important reductions in the administration of the missionary department of the board.

**Board of Education.**—Receipts for the year, \$54,072. Four hundred and seventy students had been aided, of whom 74 were colored, 24 German, 3 Bulgarian, and one was a Hindoo.

**Board of Church Erection.**—Receipts for the year, \$157,185, of which \$71,454 were from churches and individuals.

**The Committee on Theological Seminaries** reported, of the 13 institutions under its charge, that their entire real estate amounted to \$1,626,153 in value, and their endowment and other funds to \$3,693,739. Their income had been \$220,717, and they had been attended by 515 students, 195 of whom had been graduated.

**Freedmen's Committee.**—Receipts, \$79,176; expenditures, \$77,111. Good subscriptions had been received toward the erection of new buildings, and other improvements, for Biddle University and Scotia Female Seminary, amounting to \$106,176. The missionaries consisted of preachers, catechists, and teachers, as follows: Ordained ministers, of whom 56 were colored, 68; licentiates, all colored, 8; in all, 76. Catechists, all colored, 19. Teachers, males, of whom 29 were colored, 32; females, of whom 28 were colored, 46; in all, 79; making a total of 174, of whom 140 were colored. Whole number of schools, 58, with 108 teachers and 6,088 pupils. Number of chartered institutions, 5, in all of which were enrolled 1,641 students. The committee was authorized to procure a charter from the State of Pennsylvania, and to extend its missions and schools into the Gulf States as soon as its circumstances will permit.

**Board of Home Missions.**—Receipts for the Home Mission department, \$403,108; for sustentation, \$46,013; total, \$449,121. Thirteen hundred and three missionaries had been employed, 6,195 persons added on profession of faith, 1,924 adults and 3,820 infants baptized,



196 Sunday-schools organized, 81 churches built, at a cost of \$218,128, 155 churches organized, and 21 churches become self-sustaining, during the year. Whole number of members of the mission churches, 68,041; number in the congregations, 119,689; number of Sunday-schools, 1,384, with 116,501 members. Number of church buildings, 1,121, having a total value of \$3,095,806.

*Board of Foreign Missions.*—Receipts from all sources, \$592,289; expenditures, \$591,639.88, leaving a balance of \$649.80. Of this sum, \$222,252.75 were from churches, \$170,304.23 through the women's societies, \$111,356.57 from legacies, and \$76,342.76 from miscellaneous sources. The mission fields occupied by the board are among the Indian tribes of the United States, in Mexico, South America, West Africa, Siam, China, the Chinese in California, Japan, Persia, Syria. In these fields were 140 ordained American ministers, 84 ordained native ministers, 18 American male lay missionaries, 240 American female missionaries, 607 native lay missionaries, 16,484 communicants; in the boarding-schools, 636 boys and 1,247 girls; in day-schools, 12,743 boys and 4,066 girls; making a total in all the schools of 20,064. The board was expecting to send out 30 new missionaries.

The *General Assembly* of the Presbyterian Church in the United States of America met at Springfield, Illinois, May 18th. The Rev. Herrick Johnson, D. D., of Chicago, was chosen Moderator. The part of the proceedings to which the most general interest was attached was the correspondence with the Southern Presbyterian General Assembly relative to the restoration of fraternal relations, of which an account is given below. The attention of the Assembly was called on appeal to a case of discipline in which a member of the church in Emlenton, Pa., had been excluded for dancing. This brought up the question of the interpretation of an amendment to the constitution of the Church, which had recently been adopted, to the effect that appeals and complaints shall not be carried higher than the synods, unless the decision appealed from "affects the doctrine or constitution of the Church." The appellant in the present case confessed the facts charged, but denied that they constituted an "offense" in the constitutional sense of that word, thus presenting a case which, as the committee to whom the question was referred said in its report, should be held to be one affecting the constitution, and therefore properly coming under the purview of the Assembly. Action was taken upon it as follows: "The Assembly finds that there are two branches to this case: the first involving the question of jurisdiction, and the second the merits of the case. This Assembly is not now able to determine either of these questions, on account of the meagerness of the records, and on account of irregularities which are alleged to have occurred in the trial of the court be-

low. Therefore the Assembly, reserving its judgment both on the question of jurisdiction and the merits of the case, remands the whole case to the session of the church of Emlenton, with the direction to table new charges with adequate specifications, and cite the accused to answer, taking care that the evidence shall show the case to justify the judgment they may render." A committee was appointed to report to the next General Assembly the names of delegates to the next General Council of the Presbyterian Alliance, which is to meet in Belfast, Ireland, in 1884. Resolutions were adopted, deprecating the legislation of Congress with reference to Chinese immigration, and expressing the hope "that such subsequent action may be taken by our Government as will be consistent with treaty obligations, promote and foster the friendly relations hitherto existing between China and the United States, and advance the cause of Christian evangelization in that great empire." A paper on Sabbath Observance was adopted, in which the Assembly admonished all its people to bear in mind the sacredness of the day; entreated all members and officers of churches "to guard against real violations of the fourth commandment by performing labor on the Sabbath, under the claim of necessity or mercy, where such claim can not be sustained by the Word of God"; urged liberal measures to disseminate Sabbatarian principles among foreign immigrants; committed the case as to members of the church to the sessions; urged ministers to represent the subject to their congregations; and resolved, "that inasmuch as prominent among the forms of Sabbath desecration prevalent in our times are those to which many railroad and steamboat companies and publishers of Sunday newspapers are addicted, the Assembly earnestly counsel all our people not to be, as owners, managers, or employees of such companies, or as shippers or passengers on the Sabbath, or as publishers or patrons of Sunday newspapers, partakers in the guilt of their flagrant forms of Sabbath-breaking."

**II. PRESBYTERIAN CHURCH IN THE UNITED STATES.**—The following is the summary of the statistics of this Church as officially published in connection with the "Journal" of the proceedings of the General Assembly for 1882:

Synods.....	13
Presbyteries.....	66
Candidates.....	160
Licentiates.....	40
Ministers.....	1,081
Churches.....	2,010
Ruling elders.....	6,083
Deacons.....	3,917
Added on examination.....	6,062
Total communicants.....	123,806
Adults baptized.....	1,868
Infants baptized.....	4,769
Number in Sunday-schools and Bible classes.....	75,888

#### CONTRIBUTIONS.

Sustentation.....	\$36,937
Evangelistic.....	25,809
Invalid fund.....	10,407
Foreign missions.....	46,683

Brought forward.....	\$119,791
Education.....	41,014
Publication.....	8,820
Presbyterial.....	18,718
Pastors' salaries.....	540,745
Congregational.....	847,918
Miscellaneous.....	58,132
Total.....	\$1,130,138

The standing committees having the various denominational enterprises in charge reported to the General Assembly:

*Committee on Education.*—Receipts, \$11,767, or \$1,452 more than the receipts of the previous year. One hundred and fourteen candidates for the ministry were returned, against 144 in 1881.

*Committee of Home Missions.*—The receipts had been: for sustentation, \$21,715, showing an increase of \$3,189 over the contributions of the previous year; for evangelistic work, \$13,821; for the Invalid fund, \$11,088. Aid had been given in the sustentation department to 180 ministers, who were serving more than 400 churches. Eighteen pastoral charges, embracing forty or fifty churches, had become self-sustaining. Fifty-five evangelists had been supported, and twelve laborers were conducting the colored evangelistic work with a commendable degree of success. A bequest of \$25,000 had been made by Dr. Stuart Robinson to the Invalid fund, as a permanent capital, with the expectation that the Church would raise the amount to one hundred thousand dollars.

*Committee on Foreign Missions.*—The receipts from all sources had been \$69,309, of which \$51,999 were from churches and individuals, legacies, &c., \$10,984 from women's missionary associations, and \$6,326 from Sunday-schools. The increase over the receipts of the previous year was \$10,783. The missionary force under the direction of the committee included one hundred and four persons, consisting of twenty ordained ministers, one missionary physician, and twenty-six female missionary laborers from the United States; thirteen native ordained preachers, three licentiates, and forty-one native assistants, variously employed as teachers, colporteurs, and Bible readers. Connected with the missions were twenty schools, of which six were boarding-schools with about two hundred pupils, and nine were day-schools with three hundred pupils. The missions were among the Chickasaw Indians (27 organized churches and 1,008 members), in Mexico (3 churches, 220 members), Brazil (4 churches, 104 members, with an Institute at Campinas returning 57 pupils), Italy (a school at Milan), Greece, and China. The committee had contemplated a mission in Africa, but had not yet been able to establish it.

The receipts of the Tuscaloosa *Institute for the Instruction of Colored Preachers* had been \$3,678. Eleven Presbyterians and eleven students from other denominations had been instructed there, and four Presbyterians had been graduated.

The *General Assembly* of the Presbyterian

Church in the United States met at Atlanta, Ga., May 18th. The Rev. Dr. R. K. Smoot, of Austin, Texas, was chosen Moderator. The renewal of fraternal relations with the Northern Presbyterian Church was the predominant subject of discussion. An account of the action of both bodies in the matter is given below. A question of much interest was involved in the "Park case," which came up on appeal from the Synod of Memphis, and was supposed to involve the right of a colored presbyter to vote in the presbytery composed of whites. The Rev. Samuel Park, an uneducated colored man, a former slave, had been ordained by the Presbytery of Memphis to preach to the colored people, without being given the right to vote in the white presbytery. The formation of a colored presbytery appears to have been anticipated, but not carried into effect. Mr. Park was treated as a presbyter for seven years, when the issue was made as to his right to vote. The moderator decided that he had that right, and the presbytery, by a majority vote, overruled the decision of the moderator. The minority of the presbytery complained to the Synod of Memphis, which reversed the decision of the presbytery. The presbytery then complained to the Assembly against the decision of the synod. This brought up the constitutional question, Can the Presbyterian Church ordain a minister without giving him the right to vote in the presbytery? The Assembly decided that, as "perfect ministerial parity is an essential and fundamental principle of Presbyterian polity," and whereas Mr. Park had been duly and constitutionally ordained, and had been several times formally recognized by the presbytery as a duly ordained minister, it was the Assembly's judgment that he was in full ministerial connection with the presbytery, and consequently entitled to vote. Steps were taken to restore the management of the publishing interests of the Church, which were now carried on under arrangements with a company in St. Louis, to the exclusive control of the Assembly's Executive Committee, and to provide for the adjustment of the mortgage on the property in Richmond, Va., by the sale of bonds.

RESTORATION OF FRATERNAL RELATIONS BETWEEN THE NORTHERN AND SOUTHERN GENERAL ASSEMBLIES.—The Northern General Assembly, on the third day of its session, dispatched as a fraternal message to the Southern General Assembly, "Fathers and brethren, we send you our hearty salutation. See 1 Peter i, 2." In the Southern General Assembly, on the second day of the session, a resolution was offered for the appointment of a committee to convey cordial greetings to the Northern Assembly, and to express a willingness to co-operate, as far as practicable, with that body in the work of home and foreign evangelization. This was formally referred to a committee, with the understanding that it should be reported upon as soon as practicable. Before the committee was ready to report, the message from the



Northern Assembly was received, and answer was sent to it, with the approval of the Committee: "To the General Assembly of the Presbyterian Church in the United States of America, in session at Springfield, Ill. The General Assembly of the Presbyterian Church in the United States at Atlanta, Ga., sends cordial Christian salutations, wishing you grace, mercy, and peace." The Committee of the Southern Assembly to which the propositions for seeking a restoration of fraternal relations were referred, reported, with a detailed statement of reasons, against entertaining them. This report was not acceptable to the Assembly, and the committee having received several suggestions in the way of propositions offered for consideration of forms for messages to be sent to the Northern Assembly, presented as its unanimous conclusion the following paper, which was adopted by the Assembly with only three dissenting votes:

In order to remove all difficulties in the way of that full and formal fraternal correspondence for which, on our part, we are so earnestly desirous, we adopt the following minute:

That, while receding from no principle, we do hereby declare our regret for and withdrawal of all expressions of our Assembly which may be regarded as reflecting upon, or offensive to, the General Assembly of the Presbyterian Church in the United States of America.

*Resolved*, That a copy of this paper be sent by telegraph to the General Assembly now in session at Springfield, Ill., for their prayerful consideration, and, *mutatis mutandis*, for their reciprocal concurrence, as affording a basis for the exchange of delegates forthwith.

The Northern Assembly replied to this, May 20th:

The moderator is instructed to telegraph to the moderator of the General Assembly in session in Atlanta, that his telegram is received with warm enthusiasm by this Assembly, and, in order to remove all difficulties in the way of that full and formal fraternal correspondence between the two assemblies, which we are, on our part, prepared to accept, we adopt the following, to wit:

While receding from no principle, we do hereby declare our regret for and withdrawal of all expressions of our Assembly which may be regarded as reflecting upon, or offensive to, the General Assembly of the Presbyterian Church in the United States; and we renew the expression of our warm fraternal regard for all who compose its communion, and our readiness to exchange delegates forthwith.

In connection with this minute the moderator of the Northern Assembly telegraphed personally to the moderator of the Southern Assembly:

As a matter of information, and in justice to all parties, I would say that our Assembly's action on your basis for fraternal relations was taken *mutatis mutandis* with great heartiness, only two or three dissenting.

Pending our action the following resolution was passed:

*Resolved*, That, in the action now to be taken, we disclaim any reference to the action of previous Assemblies concerning loyalty and rebellion, but only to those concerning schism, heresy, and blasphemy.

We were led in prayer after final action, and sang the doxology amid grateful and profound feeling.

We shall welcome words from your Assembly concerning delegates.

To these papers the Southern Assembly replied:

If the action of your Assembly, telegraphed by your moderator to our moderator, does not modify the concurrent resolution adopted by your Assembly and ours, we are prepared to send delegates forthwith.

To which the moderator of the Northern Assembly replied:

The action referred to does not modify, but it explains, the concurrent resolution, and the explanation is on the face of the action. There is nothing behind it or between the lines.

The dissolution of our Assembly is near at hand. We may be ready for final adjournment this evening. An exchange of delegates is impossible before Tuesday. Shall we each appoint delegates this day to visit the respective Assemblies next year? We await your answer with deep and prayerful interest.

And to this the following reply was adopted, and sent by the Southern General Assembly:

ATLANTA, GA., May 27.

*To the General Assembly of the Presbyterian Church in the United States of America, in session at Springfield:*

It was unanimously resolved—1. That the Assembly does hereby declare its entire satisfaction with the full and explicit terms in which the General Assembly of the Presbyterian Church in the United States of America has expressed its reciprocal concurrence in the paper transmitted to our Assembly on fraternal correspondence.

2. That we do unfeignedly rejoice, and render thanksgiving to God for an event suited to take away the reproach of alienation between bodies holding the same standard of faith and order, and tending to bring peace to our borders.

3. That, inasmuch as it is impracticable at this late day to have an interchange of delegates, the Assembly does hereby appoint the following to your Assembly at its next session:

Principals: Rev. William Brown, D. D., Rev. T. A. Hoyt, D. D., Hon. B. M. Estes.

Alternates: Rev. R. P. Farris, D. D., Rev. H. C. Alexander, D. D., Hon. Patrick Joyes.

R. K. SMOOR, Moderator.

The Northern Assembly thereupon appointed the following delegates on its part:

Principals: Rev. S. J. Nicolls, D. D., Edwin F. Hatfield, D. D., and Hon. S. M. Moore.

Alternates: Rev. Arthur Mitchell, D. D., Rev. S. Irenæus Prime, D. D., and Hon. William E. Dodge.

III. UNITED PRESBYTERIAN CHURCH IN NORTH AMERICA.—The following is a summary of the statistics of this Church as they were reported to the General Assembly in May: Number of synods, 9; of presbyteries, 60; of ministers, 719, of whom 541 were returned as serving as pastors and stated supplies; of licentiates, 39; of students of theology, 50; of congregations, 826, of which 661 were served by pastors and stated supplies; of members, 84,573; of Sunday-schools, 809, with 8,647 officers and teachers, and 72,596 scholars; number of baptisms during the year, 629 of adults, and 3,720 of children. Amount of contributions:

For salaries of ministers.....	\$461,493
For congregational purposes .....	265,717
To the boards.....	140,716
General contributions.....	62,199
Total.....	\$930,125
Average per member.....	11 40
Average salary of pastors.....	865 00

Increase of members during the year, 1,636. The *Board of Church Extension* had received \$23,334, and reported its liabilities to be \$17,562, and that these were partly offset by a balance in the treasury of \$10,148.

The *Board of Ministerial Relief* had received \$10,625, and returned twenty-two beneficiaries receiving aid regularly. Its endowment now reached \$30,000, which was principally invested in Government bonds.

The *Board of Education* had received \$12,059, and reported investments and other assets to the amount of \$16,260. It had aided twenty students of theology.

The *Board of Freedmen's Missions* had received \$12,727, and reported an indebtedness, largely on account of real estate, of \$12,727. It had 718 pupils in its day- and boarding-schools, and 1,000 in Sunday-schools. Fifty-seven students from its schools were engaged in teaching, and had about 2,500 pupils under their charge. The board sustains a college and industrial school at Knoxville, Tenn., and a considerable school at Chase City, Va.

The *Board of Home Missions* had received \$39,344. It had 76 men able and willing to receive appointments, while the time of only 68 missionaries was asked for by the presbyteries. The 244 mission stations reported 11,564 members, and 12,964 attendants at Sunday-school.

The receipts of the *Board of Foreign Missions* had been \$77,872. The following report was made of the condition of missions on the first day of January, 1882: Presbyteries, 2; stations (places where foreign missionaries are located), 8; out-stations, 69; foreign ordained ministers, 15; female missionaries, including the wives of missionaries, 27 (unmarried, 13); native ordained ministers, 8; licentiates, 5; native teachers and helpers, 184; total foreign and native laborers in the two missions, 239; native congregations, 19; communicants, 1,565; increase, 370; decrease, 141. Total net increase, 229. Baptisms—adults, 130; infants, 189; total, 319. Sabbath-school scholars, 2,244; in other schools, 4,577; in all the schools, 6,151. Contributions for church and benevolent purposes, \$5,058; for schools, \$11,171; for books, \$6,248; total by the natives, \$23,272. Books sold and distributed (by the Egyptian mission), 27,150 volumes. Total value of the property in both missions, \$122,268. Of the members, 1,168 were in Egypt, and 397 in India.

The twenty-fourth *General Assembly* of the United Presbyterian Church in North America met at Monmouth, Ill., May 24th. The Rev. Dr. David Paul, of Ohio, was chosen Moder-

ator. The principal interest of the proceedings lay in the action which was taken on the subject of permitting the use of instrumental worship in the churches. An overture to rescind the rule prohibiting the use of instrumental music in worship had been sent down to the presbyteries to be voted upon. The report of the voting showed that 1,233 votes had been cast, of which 620½ were in favor of the repeal of the prohibition, and 612½ were against it, while nine persons entitled to vote were returned as not voting. The proposition thus appeared to be carried by a majority of eight, although it had failed to receive the assent of a majority of the whole number of persons entitled to vote. The Assembly, considering the measure lawfully carried, ratified the action, and declared, by a vote of 125 to 99, that the rule prohibiting the use of instrumental music was repealed. In connection with this action, it further resolved that its decision was not to be considered as authorizing instrumental music in the worship of God, but simply as a declaration of the judgment of the Church that there is no sufficient Bible authority for an absolutely exclusive rule on the subject. "That while there may be a liberty here, it is a liberty which in itself, especially in the present state of the Church, should be stringently regulated and kept from abuse, or any use that would conflict with the required simplicity of Christian worship." And it instructed the lower courts "to abstain, and have all under their authority abstain, from any action in this matter that would disturb the peace and harmony of congregations, or unreasonably disregard the conscientious convictions of members."

The party in the Assembly opposed to this action maintained that the measure had not been lawfully carried in the presbyteries, because it had not received a majority of the votes entitled to be cast, and contended that the nine votes not cast should be taken account of; and they presented a protest embodying their views, in answer to which a paper was filed by the committee having the subject in charge, vindicating the action of the Assembly, and its interpretation of the constitution of the Church.

A committee was appointed to prepare a brief statement of principles for use in mission work, and report to the next Assembly. The Assembly declared its readiness to co-operate with other churches in every proper way to secure the enforcement of legislation for the protection of Christian citizens in the enjoyment of their rights on the Lord's day.

No progress was made in the negotiations with the Associate Reformed Synod of the South for union.

IV. REFORMED PRESBYTERIAN CHURCH (SYNOD).—The statistics of this body, as reported at the meeting of the synod in May, show that the ten presbyteries of which it is composed include 108 ministers, 122 congregations, and



10,661 communicants. The total amount of collections, including \$79,147 for pastors' salaries, was \$191,893. The income for foreign missions was \$12,835.

The *Synod of the Reformed Presbyterian Church (O. S.)* met at New Concord, Ohio, May 24th. The law of tithes was declared binding on all Christians. Secret societies were denounced as unnecessary, sinful, opposed to the Master's example, and essentially hostile to the best interests of society. The "Anti-Chinese bill" was declared a breach of treaty obligations, opposed to the spirit of the age, a gross violation of the law of God, and calculated to arrest missionary effort among the Chinese. The merits of the labors which had been spent upon the revision of the New Testament were recognized, but the synod declared itself compelled to withhold its entire approbation from the revised version, while it recommended it for study. The views of the synod with reference to the incorporation of a recognition of the principles of the Christian religion into the Constitution of the United States were reiterated, and the sum of \$10,000 was appropriated in aid of the agitation of those views during the year. The question was brought up whether members of the Church in Iowa could, consistently with the Church's position respecting the Constitution of the United States, vote in the election then pending on the amendment to the Constitution of the State prohibiting the manufacture and sale of intoxicating liquors. The synod decided that the matter should be left to the presbyteries and sessions, who were to see that the principles of the Church, allowing all civil action not inconsistent with its dissent from the Constitution of the United States, were observed.

**V. REFORMED PRESBYTERIAN CHURCH (GENERAL SYNOD).**—The presbyterial reports of statistics of this body are incomplete, but the number of communicants is estimated at 6,700, of whom 3,500 are in the three eastern presbyteries, and 3,200 in the three western presbyteries. The receipts of the year for the Church Extension Fund had been \$653; for the Educational Fund, \$289; and for the Endowment Fund of the Theological Seminary, \$3,839. The appropriations for home missions were \$2,000.

The General Synod met at Darlington, Pa., in May. The Rev. W. J. Macdowell, of Brooklyn, N. Y., was chosen Moderator. The attempt in the previous year to establish a mission in Roorkee, India, had failed, through the refusal of the appointed missionary to serve.

**VI. CUMBERLAND PRESBYTERIAN CHURCH.**—The following is a summary of the statistics of this Church, as they were reported to the General Assembly of 1882:

Number of presbyteries, 117; of ministers, 1,422; of licentiates, 224; of candidates for the ministry, 197; of congregations, 2,587; of members, 115,749; of scholars in Sunday-schools, 58,184. *Contributions:* For home missions, \$11,218; for foreign missions, \$4,447;

for education, \$8,062; for publication, \$1,705; for church building and repairing, \$105,876; for pastors, \$183,037. Value of church property, \$2,059,950.

The *General Assembly of the Cumberland Presbyterian Church* met at Huntsville, Ala., May 18th. The Rev. S. H. Buchanan, D. D., of Little Rock, Ark., was chosen Moderator. The Board of Publication reported that its receipts had been \$43,240, and estimated its total resources at \$61,250. The Board of Missions reported that its cash receipts had been \$14,870, besides which considerable amounts, bringing the whole sum contributed for mission work to \$21,337, had been paid directly to missionaries by local treasurers, or through the Woman's Board. The mission in Japan, now four years old, was making good progress. The American Indian Mission had assumed the support of its missionary. The contributions for ministerial relief had been \$598. A board to take charge of that cause had been incorporated. A Board of Education also had been incorporated. The most important business before the Assembly was the consideration of the revision of the Confession of Faith, upon which a committee had been laboring for a considerable period. The whole work was discussed with considerable interest, but no essential differences were revealed on any of the points except the articles on Sanctification and Divorce. On the former subject, the following expression of faith was adopted: "The doctrine of sanctification is taught in the Word of God, and it is the duty and privilege of Christians to avail themselves of its inestimable benefits. The doctrine of sinless perfection is not authorized by the Scriptures, and is a dogma of dangerous tendency." The article on Divorce, as adopted, declares that "the marriage relation should not be dissolved for any cause not justified by the Word of God, and any immorality in relation to its dissolution is cognizable by the State courts." The delegates appointed by this Church to attend the meetings of the Presbyterian Alliance had not been admitted by that body, on the ground that the Church had not approved the constitution of the Alliance, and that the Alliance was not satisfied that its creed was in harmony with the consciences of the Reformed churches. The Assembly had since approved the constitution of the Alliance, and had referred the question of doctrinal position to a committee for consideration. That committee now made a report on the subject, which was adopted, in substance as follows:

The founders of the Cumberland Presbyterian Church, in their licensure and ordination by the Presbyterian Church, were permitted to "except the idea of fatality," as they believed it to be embraced in the doctrine of unconditional election and reprobation, and an atonement limited to a definitely elected number, as taught in the Westminster Confession of Faith. Subsequently, having for this been cut off from the parent Church, in fixing a standard of doctrine for the Cumberland Presbyterian Church, which they or-

ganized, they adopted the Westminster Confession of Faith, modified in the following particulars:

1. That there are no eternal reprobates.  
2. That Jesus died, not for a part only, but for all men, and in the same sense.

3. That *all* infants dying in infancy are saved.

4. That the Holy Spirit operates on all the world—for all for whom Christ died, in such a manner as to render all men responsible, and therefore inexcusable.

By these exceptions it will be seen that we have an amended form of the Westminster Confession of Faith; and, if this puts us out of harmony with the Consensus of the Reformed Confessions, we will be glad to have the fact clearly and unequivocally stated.

That this may be certainly done by the next Council, delegates were appointed to attend the next meeting of the Alliance, to be held in Belfast, Ireland, in 1884. On the subject of Sabbath observance, in reply to an invitation from a committee of the Southern Presbyterian Church to join in representations to the civil authorities against running railroad trains and delivering mails on the Lord's day, the Assembly declared that:

While we deplore the fact that trains are run and mail is delivered on the Sabbath, we do not see the consistency in invoking civil power to check the evil, while our business men make the demand for handling and carrying freight, and while ministers and church members demand the running of trains and the delivery of mails on the Sabbath. We therefore recommend that this General Assembly insist upon the better observance of this day by all the members of the Church, to the end that a public sentiment may be cultivated in its favor.

Co-operation was, however, pledged to "any judicious movement looking to the better observance of the Sabbath."

VII. PRESBYTERIAN CHURCH IN CANADA.—The dispute which arose, when the union of the Presbyterian churches in Canada took place in 1875, over the disposition of the Temporalities Fund, which had belonged to the organization known as the Presbyterian Church of Canada in connection with the Church of Scotland, was carried to the Imperial Privy Council, and was finally decided by that court early in the year. A number of ministers, who held aloof from the union and upheld the organization in connection with the Church of Scotland, resisted the transfer of the fund to the United Church. The moderators of the churches entering into the union secured from the Legislature of Ontario an act giving the possession of the fund to the United Church. This was contested in the courts, and, after a prolonged litigation, the Privy Council decided that the transfer was unlawful, and an injunction could be issued preventing the disposition of the funds for the advantage of the United Church.

VIII. ESTABLISHED CHURCH OF SCOTLAND.—The Endowment Committee of this Church reported to the General Assembly in May that during the year eight new parishes, with a population of 24,670, had been endowed, making a total of churches endowed since the beginning of the scheme 312. The total revenue for 1881 amounted to £14,847, against £18,594

in 1880, and £14,581 in 1879. The income for home missions had been £9,130, and the expenditure had been £81 more than that amount. The sum of £1,520 had been voted to 53 mission stations, £3,285 had been granted to 77 mission churches, and £5,982 had been voted toward the enlargement or erection of 17 churches. The Committee on Christian Liberality reported a decrease of £38,343 in the total amount of contributions, the present amount, exclusive of seat rents, being £281,503, against £319,847 in 1880. The Foreign Missions Committee reported an improved financial condition. Its entire revenue had been £22,853, showing a marked improvement on the revenues of former years, though it was still behind the sums raised by the Free and United Presbyterian churches for similar purposes. The income of the Jewish Mission had been nearly £1,000 below its expenditures; and only one convert was reported.

The *General Assembly* of the Church of Scotland met in Edinburgh May 25th. The Rev. Dr. William Milligan was chosen Moderator. For the first time the Assembly took formal notice of the agitation which is active in the other churches of the kingdom in favor of disestablishment, and resolutions were adopted to the effect that a committee be appointed to watch over and take any steps that might be thought necessary and advisable in regard to any question or measure brought before the Legislature affecting the interests of the Church; and, should opportunity arise, to aid by active good-will and co-operation in any movement having for its object the promotion of the cause of national religion and the interests of the true Protestant religion in Scotland; and that a pastoral letter be issued to the members of the Church, instructing them in its principles, and reminding them of the many blessings it had conferred on Scotland, and of the duty under which its members lay to be loyal to an institution which God had so blessed, and transmit it unimpaired to future generations. The case of the mission at Blantyre, Central Africa, in which the Assembly of 1881 had felt itself obliged to censure some irregularities in administration and cruel acts toward natives, was brought up again by the petitions of the Rev. Duff Macdonald asking to be personally exonerated from the censure, and of Mr. John Buchanan for a reconsideration of the case. The Assembly adopted an expression modifying its censure as against Mr. Macdonald, testifying to the good work he had done, and declaring that no good reason existed why he should not still be considered useful in Christian work. The present management and condition of the mission were represented to be wholly satisfactory. The statement of doctrine and formula to be used in the admission of native preachers, which had already met with the approval of the other Scottish Pres-



byterian churches, was referred to a special committee, to consider and report upon it at the next session of the Assembly.

A Scottish National Church Defense Society has been organized, to resist the movement for disestablishment. Its object is declared to be "to supply information respecting national religion and the true position of the Church of Scotland, to intensify a sense of corporate unity among all having common views on this subject, and especially to organize all members of the Church, and all favorable to national religion, in defense of the national position of the Church."

**IX. FREE CHURCH OF SCOTLAND.**—The total revenue of the Free Church of Scotland, as returned for the year at the meeting of the General Assembly in May, was £607,500, or £17,000 more than the revenue for the preceding year. The Committee of the Sustentation Fund reported an increase of £915 in the contributions. The Committee of Jewish Missions had received £6,680, and reported the conversion of seven Jews. The income of the Foreign Missions Committee had been £82,726, and exceeded the income of any previous year. The operations of the missions were now carried on in thirteen fields, specified as those of Calcutta and Lower Bengal, the Santhals, Bombay, Poona, Deccan, Central India, Madras, South Caffraria, North Caffraria, Zululand, Livingstonia, the New Hebrides, and Syria. Among the publications of the year were a grammar and a dictionary of the Aneityum language of the New Hebrides.

The *General Assembly* of the Free Church of Scotland met at Edinburgh, May 18th. The Rev. Dr. Robert Macdonald, of North Leith, was chosen Moderator. The session was occupied chiefly with the questions of disestablishment, the doctrinal position and relation to the Church of two of its members who had gained prominence as teachers and authors, and instrumental music, each of which was the subject of an active discussion. On the question of disestablishment, resolutions were adopted reaffirming the previous expressions of the Assembly in favor of disestablishment, and declaring that the Free Church "does not regard the maintenance of an established Church in Scotland as in present circumstances a legitimate or useful way of expressing national homage to Christ; while the continued maintenance of the existing establishment by the State is unjust and oppressive."

Petitions were presented from two Presbyteries asking for inquiry into a new book of Professor Bruce on "The Chief End of Revelation," which was regarded as divergent from orthodoxy on several points, and Dr. W. Robertson Smith's work on the "Old Testament in the Jewish Church," in which a line of thought was followed parallel with that of other works of the same author which had engaged the attention of previous assemblies. Principal Rainy moved, with reference to both

cases, that, in all the circumstances, the Assembly deem it neither necessary nor expedient to take action in the matter; and his motion was adopted.

The question of the use of instrumental music in the services of the Church was remitted to a committee, to report to the next Assembly. Twelve overtures desiring a change in the formula of subscription by deacons were taken up, and referred to a committee to consider the whole matter and report to the next Assembly. The Rev. George O. Cameron, of St. John's church, Glasgow, was appointed Professor of Hebrew in the college at Aberdeen, in place of Dr. W. Robertson Smith.

**X. UNITED PRESBYTERIAN CHURCH OF SCOTLAND.**—The total number of members of this Church was reported to the synod in May to be 174,557, or 575 more than were reported in the previous year. The total income of the Church was £383,370, £725 more than the income of the previous year, and representing a higher amount than had ever before been returned.

The *Synod* of the United Presbyterian Church of Scotland met in Edinburgh, May 8th. The Rev. Daniel Young, of Glasgow, was chosen Moderator. A decrease in the number of members of the Church had been reported at the last two previous meetings of the Assembly, but the statistical committee were able this year to report a net increase for the year of 575 members, although the number was still about 500 less than in 1878. The following declarations on the status of the foreign missions were adopted:

That the Synod and Presbyteries of Jamaica, and the Presbyteries of Biafra, Caffraria, and Rajpootana shall be regarded as standing in a federal relation to the Synod, and as being no longer constituent parts thereof; that any missionary presbyteries which may hereafter be formed shall be regarded as occupying the same position; that no formula shall be used within the bounds of a missionary presbytery until it has received the sanction of the synod; that no decision of a missionary presbytery or synod affecting the status of any agent of the Mission Board, appointed by the home Church, shall take final effect, unless all the parties and the Mission Board acquiesce therein, or, otherwise, till it has been confirmed by the synod; that, in regard to all matters of administration affecting the property of the synod, or the agents appointed by the Mission Board, no decision of a missionary presbytery shall have any effect unless it is acquiesced in by the board; that, in the event of congregations belonging to any of our missions joining with those of any other Church or Churches to form a United Missionary Presbytery, the rights of the home Church and its agents shall be reserved; and that members of missionary presbyteries, whether ministers or elders, and of other ordained missionaries of the Church, who are in this country during the synod meeting, shall, under conditions named, be entitled to sit in the court and take part in its deliberations, but without the right of voting.

The synod declined to recognize the council of the Presbyterian Alliance in India as a final court of appeal in matters concerning native members. A proposed statement of doctrine and formula for native elders, licentiates, and ministers was submitted, with an ex-

planation that it had been found needful in all the mission fields to have simple formulas for the native candidates. It was found by all missionaries that it would never do to make use of the Westminster Confession of Faith, the Larger and Shorter Catechisms, and the other standards in the native churches. Negotiations had been going on between the committees of the Established and Free Churches and of this Church for some time in regard to this matter; and the document now offered, which had been drawn up by the synod's committee, containing a simple statement of Christian doctrine, had been approved, in the main, by the committees of the Established and Free Churches. The statement and formula were adopted. The synod resolved to petition Parliament in favor of the disestablishment of the Church of Scotland. An effort was made to have the synod rescind the action it had taken in 1872 on the use of instrumental music in public worship, and adopt fresh restrictive legislation on the subject, but it failed.

**XI. PRESBYTERIAN CHURCH IN ENGLAND.**—This Church is made up, according to the statistical reports for 1882, of 275 congregations, besides several preaching-stations, 264 ministers with charges, 24 missionaries, and 56 other ministers, 56,099 communicants, and about 108,000 adherents. The number of church-sittings, as reported to the synod, was 141,903, showing an increase of 5,007 during the year. The Union Thanksgiving Fund, which was now completed, amounted to £155,839. The entire income of the Church for the year had been £208,226, against £205,603 in 1880. The Home Mission Committee presented a proposition that the synod undertake to create at least fifteen or twenty new congregations, each with a suitable church, within the next five years, and to raise £25,000 for church-building purposes. The Foreign Mission Committee reported that the annual expenditures on its work were not less than £13,500, while its income did not exceed £11,500. The missions were in the Amoy, Swatow, and Formosa districts of China, and returned 26 missionaries, 74 native evangelists, 37 native students, 316 adult baptisms during the year, and 2,342 communicants, with 1,000 baptized children. Five native pastors had been settled over self-supporting churches, a second native presbytery had been formed, a medical mission had been established and another one revived, and a home for Bible women had been opened during the year. The *Synod* of the Presbyterian Church in England met in London, April 23d. The Rev. William McCaw, of Manchester, was chosen Moderator.

**XII. PRESBYTERIAN CHURCH IN IRELAND.**—The statistics of this Church, presented to the General Assembly in June, show the entire number of communicants to be 102,825, as against 109,395 in 1881, and 122,792 in 1864. Reports were made of 558 congregations and 7 mission stations. The entire amount raised

by the Church for all purposes had increased by £7,016 over the amount reported in the previous year. The number of Sunday-schools connected with the Assembly was 1,101, with 8,552 teachers and 91,025 scholars. The Committee on Elementary Education reported that 828 of the 7,590 schools of the National Board were under Presbyterian management. The report of Belfast College stated that the Presbyterian Church now required from its theological students a university degree in arts, and also attendance on the Presbyterian College classes during the undergraduate course. The Committee on Colonial Missions reported that three ministers had recently been sent to New South Wales. Grants of £650 had been made to Canada and Manitoba College. Twenty-seven missionaries, of whom 21 were ordained ministers, had been employed in Canada, laboring with considerable success, especially among the French-speaking population.

The *General Assembly* of the Presbyterian Church in Ireland met in Belfast in May. The Rev. T. Y. Killen, of Belfast, was chosen Moderator. The question of the use of instrumental music in worship engaged a large share of attention. A resolution was adopted, by a vote of 360 to 345, ordering that the prohibition which the Assembly had issued in the previous year against the use of instrumental music in churches be carried out without delay. Afterward, a notice of motion, signed by sixty members of the Assembly, was read, stating that in the next year a proposal would be made to rescind the resolution which had been carried by so narrow a majority at the present Assembly. The Assembly recommended that the examinations before the Theological Committee, instead of referring to the theological views and personal experience of the candidates, should embrace such subjects as Hebrew, Biblical Criticism, Greek Testament, Christian Ethics, Church History, and Systematic Theology.

**XIII. REFORMED PRESBYTERIAN CHURCH IN SCOTLAND.**—The Reformed Presbyterian Synod of Scotland met at Glasgow in May. A report was presented by the National Reform Committee, which held that the fundamental evils of the British Constitution consist in the Word of God not being recognized as the standard of legislation; that the headship of Christ is invaded by the British Crown; and that episcopacy, with its unscriptural hierarchy and liturgy, was established and endowed. The holding of public meetings to agitate these views and the pressing of them upon members of Parliament were urged.

**XIV. WELSH CALVINISTIC METHODIST CHURCH.**—The following are the statistics of this Church as they were reported to the General Assembly at Bala in June. Number of ordained ministers, 600; of preachers, 357; of chapels, 1,324; of communicants, 118,635; of adherents, 279,189; of Sunday-school teachers, 22,262; of scholars in Sunday-schools,



163,373. Amount of contributions for the year, £157,348; value of church property, £1,000,000.

The *General Assembly* met at Bala, June 15th. The Rev. T. Levi, of Aberystwyth, was chosen Moderator.

**XV. WALLOON CHURCHES.**—The annual synod of the Walloon churches was held in Rotterdam in July. The churches are in a condition of decline, owing to the gradual dying out of the use of the French language, and only those at Rotterdam, Amsterdam, and the Hague, out of the seventeen organizations still in existence, seem to be prospering. In view of these facts, the synod appointed a committee to collect materials for a history of the churches since their foundation by the Walloons, who sought a refuge in Holland in the time of the Reformation.

**PROTESTANT EPISCOPAL CHURCH.** Whittaker's "Protestant Episcopal Almanac and Parochial List" for 1883 gives statistics for this Church of forty-eight dioceses and sixteen missionary jurisdictions (of which twelve are in the United States and Territories and four in foreign mission fields), of which the following is a summary: Number of bishops, 66; number of clergy (priests and deacons), 3,513, or, including the bishops, 3,579; number of parishes, 3,047; number of missions, 1,310; whole number of communicants, 348,888; number of candidates for orders, 396; number of ordinations, 132 of deacons, 116 of priests; number of baptisms, 45,817; of confirmations, 26,091; number of Sunday-school teachers, 34,675; of Sunday-school scholars, 308,591. Total amount of contributions by the churches, \$8,066,404.

"Whittaker's Almanac" gives an exhibit of the ratio of communicants to the population in five decades, beginning in 1830, which shows the advancing growth of the Church as follows: In 1830 there was one communicant to every 410 of the population; in 1840, one to every 308; in 1850, one to 292; in 1860, one to 214; in 1870, one to 175; in 1880, one to 151.

**THE PRESIDING BISHOP'S FIFTIETH ANNIVERSARY.**—The fiftieth anniversary of the consecration of Presiding Bishop Smith, which took place, together with the consecrations of Bishops McIlvaine, Doane, and Hopkins, October 31, 1832, was celebrated in the city of New York on October 31st. Special religious services were held on the previous day (Sunday), commemorative of the event, in St. Paul's Chapel, when appropriate discourses were delivered by the Bishop of Albany and the Rev. Dr. Hopkins. The celebration itself was marked by the presentation of congratulatory addresses from the clergy of New York, the bishops of the Church of England, the Episcopate of the Church in the United States, the Standing Committee of the Presiding Bishop's own diocese of Kentucky, and the Executive Committee of the Church Temperance Society. A chalice and paten were presented to the bishop, as a

memorial of the occasion, by churchmen of New York.

**BISHOP OF MISSISSIPPI.**—At the regular annual council of the Diocese of Mississippi, which met in April, the Right Rev. Dr. John N. D. Wingfield, Missionary Bishop of Northern California, was elected Assistant Bishop to Bishop Green, whose advanced age and infirmities rendered such an aid necessary. Bishop Wingfield declined to accept the appointment. A special council of the diocese was called, and met on November 28th, when the Rev. Hugh Miller Thompson, D. D., Rector of Trinity Church, New Orleans, La., was chosen assistant bishop.

**CHURCH TEMPERANCE SOCIETY.**—The *Church Temperance Society* was founded in 1881, with the aid of Mr. R. Graham, one of the general secretaries of the Church of England Temperance Society. Its general constitution is based on principles parallel with those on which that society is founded; and it is intended to furnish a platform on which total abstainers and non-abstainers may work together and in harmony for the promotion of temperance. It was organized with the presiding bishop as president, and the bishops of the dioceses were invited to act as vice-presidents. The formation of diocesan societies in the several dioceses was recommended, and work was begun at once for the establishment of local societies. In March, 1882, letters were sent out to the secretaries of the diocesan conventions, suggesting to them that the organizing secretary of the society desired, provided their bishops approved of it, to obtain at as early a day as possible the passage of some resolution giving official sanction to the work and objects of the society in their several dioceses, and inviting the choice of clerical and lay delegates to attend a National Church Temperance Convention to be held in the city of New York in October. These letters were answered by favorable replies. The convention was opened October 29th with services in the churches of the city, after which business meetings and general public meetings were held on the 30th and 31st. At these meetings papers were read or addresses made on "Prohibitory and Licensing Law in the United States," the "Non-observance of Liquor Law in New York City," "The Formation and Management of Parochial Temperance Societies," and "Juvenile Societies." At the final public meeting, over which the Bishop of Louisiana presided, Bishop Clark, of Rhode Island, spoke in commendation of the "broad, tolerant, and scriptural methods" of the society, and Bishop Dudley, of Kentucky, made an expression of similar significance.

**SOCIETY FOR THE INCREASE OF THE MINISTRY.**—The receipts of the *Society for the Increase of the Ministry*, for the year ending September 1st, were \$24,722; its expenditures were \$23,269. The invested funds amounted to \$54,927. Twenty-one scholars of the society had been admitted to holy orders since

the last annual report. The society had received, since its organization in 1857, the total sum of \$561,701, of which, after deducting the receipts from legacies and the income from invested funds, \$465,661 represented the contributions of the Church at large through this agency to the cause of ministerial education. Appropriations had been made in aid of 1,016 scholars, of whom 600 had been ordained ministers, and 518 were still in service.

**EVANGELICAL KNOWLEDGE SOCIETY.**—The receipts of the *Protestant Episcopal Society for the Promotion of Evangelical Knowledge*, for the year ending October 1, 1882, were \$8,687, and its expenditures were \$3,885. The society had put into circulation during the year books, tracts, and papers, the value of which was about \$6,700. Its monthly journal, "The Parish Visitor," had a circulation of about 20,000 copies.

**DOMESTIC MISSIONS.**—The general receipts of the *Committee for Domestic Missions*, for the year ending September 1, 1882, were \$126,734; adding \$70,956 of legacies left to the committee and \$30,683 of special contributions, the total receipts were \$228,373. The total sum available for the use of the committee was \$210,951, of which it had \$33,201 left at the beginning of the year. The committee employed as evangelizing agents—among white people, 12 missionary bishops, 292 clergymen, and 5 women helpers, or 309 in all; among colored people, 13 white clergymen, 15 colored clergymen, 5 lay readers, 4 teachers, and 18 women helpers—55 in all; among the Chinese, 1 Chinese clergyman; among the Indians, 1 missionary bishop, 12 white clergymen, 13 native clergymen, 1 white catechist, 9 native catechists, 3 teachers, and 13 women helpers—52 in all; the whole number constituting a total of 417 laborers. In support of the missions and missionaries, \$141,417 had been expended among white people, \$41,666 among Indians, \$13,667 among the colored people, and \$8,718 at the central office.

**FOREIGN MISSIONS.**—The receipts of the *Committee for Foreign Missions*, for the year ending September 1, 1882, had been \$173,848. Of this amount \$20,459 had been contributed by the Women's Auxiliary, and \$20,067 by the League in aid of the Mexican branch of the Church, for the benefit of the missions in Mexico. The missions were: in Greece, 1 teacher, 9 assistant teachers, and 700 students; West Africa, 16 missionaries (including the bishop), 27 other laborers, 560 native and Liberian communicants, 392 scholars; China, 11 missionaries and ministers, 94 other laborers, 320 native communicants, 738 scholars; Japan, 8 missionaries and ministers, 39 other laborers, 84 native communicants, 117 scholars; Hayti, 15 missionaries and ministers, 49 other laborers, 360 communicants, 199 scholars, 1,258 attendants on worship; Mexico, 14 missionaries and ministers, 94 other laborers, 929 native communicants, 555 scholars, 3,646 attendants on worship. The

list of missionaries includes the bishop in each mission, and, in Mexico, a bishop elect also, and the missionary physicians, when there are any; the enumeration of scholars includes those in day- and boarding-schools, but not those in Sunday-schools. The Mexican Church had been troubled with dissensions, and was represented as suffering from the want of accessible standards of doctrine and worship, the Mexican liturgy not having yet been completed.

**AMERICAN CHURCH MISSIONARY SOCIETY.**—The twenty-third annual meeting of the *American Church Missionary Society* was held in Philadelphia, Pa., in December. The total receipts of the society for the year had been \$24,677, and it had a balance in the treasury, on the 31st day of August, of \$2,894. Boxes of clothing and other articles had been sent to the missionaries, the total value of which was \$3,724. Thirty-seven missionaries had been commissioned, and four had resigned, leaving thirty-three, or four more than had been engaged during the previous year, in the field. Their fields of labor had been in fifteen dioceses and missionary jurisdictions. A new plan of administration had gone into operation on May 1st, under which the society was saved the expense of salaries for its secretaries and of office-rent. The offices of financial secretary and general agent had been abolished; the office of secretary had become voluntary, and was filled by a person who did its work gratuitously; and the necessary expenses of office-rent, printing, and other incidental matters were met by the gifts of a few friends especially contributed for those purposes. Thus every dollar of the income of the society now went directly to the support of its missionaries and the maintenance of its work.

**MISSIONS AMONG THE JEWS.**—The receipts of the *Church Society for Promoting Christianity among the Jews* for the year ending in April, 1882, were \$12,383; the expenditures were \$7,173, leaving a balance in the treasury of the society of \$5,210. During the year five new missionaries had been appointed, and two new missionary schools had been established, giving, as the full measure of the present operations of the society, fourteen missionaries, with four missionary day-schools and four industrial schools. In these schools were about two hundred children. Missions were established in most of the large cities of the country. The society had mission houses in Baltimore and New Orleans. A house had been bought in New York, in which it was intended to provide a chapel, with accommodations for the missionary day-school, the industrial school, the Sunday-school (of seventy Jewish children), a free reading-room, an office for the missionaries, and a residence for one of them. By an inflexible rule, no temporal aid was ever given to proselytes. Aid had been given to the parochial clergy in efforts among the Jews in their own localities, and this branch of the work was now carried on in thirty-four dio-



ceses and ten missionary jurisdictions; while the number of clergy engaged in it had nearly doubled, having been for the past year two hundred and twenty-two. The Jews in two hundred and one cities and towns were now directly reached by the society.

**THE CHURCH CONGRESS.**—The eighth annual *Church Congress* was held in Richmond, Va., October, 24th, 25th, 26th, and 27th. The opening address was delivered by the Bishop of Louisiana. Papers, to which were added extempore addresses in the general discussion of the several subjects, were read as follows: "The Position and Work of the Laity in the Church," Rev. George O. Shattuck, Boston, Mass., and Rev. Arthur Brooks, New York; "The Priestly and Prophetic Functions of the Christian Ministry," Rev. William R. Huntington, D. D., Worcester, Mass., Rev. S. D. McConnell, Philadelphia, Pa.; "The Relation of the Church to the Colored Race," Right Rev. W. B. W. Howe, D. D., Bishop of South Carolina, Rev. J. E. C. Smedes, Raleigh, N. C., and Rev. Henry Dunlop, Savannah, Ga.; "The Powers of Standing Committees," Rev. Hall Harrison, Ellicott City, Md., Hugh W. Sheffey, LL. D., Stanton, Va.; "Inspiration of the Scriptures," Rev. Frederic Gardiner, D. D., Middletown, Conn., Rev. A. M. Randolph, D. D., Baltimore, Md., John Dunlop, Esq., Richmond, Va.; "Christianity and the Criminals," Rev. H. C. Potter, D. D., New York city, Charles H. Kitchel, Esq., New York; "Requirements for Confirmation," Rev. H. Y. Satterlee, D. D., New York city, Rev. C. W. Rankin, D. D., Baltimore, Md.

**PRUSSIA.** (See GERMANY.)

**PUSEY, EDWARD BOUVIERE, D. D., D. C. L.** Born in 1800, he was second son of the Hon. Philip Bouvier (who assumed the name of Pusey by royal license), and nephew of the first Earl of Radnor. His early training was received at Eton. He entered Christ Church, at Oxford, was graduated with honors in 1822, and the next year was elected a Fellow of Oriel College. He took orders in the Church of England in 1824, and devoted himself assiduously for some years to Biblical studies, both at home and in Germany. In 1828 he was appointed Regius Professor of Hebrew in the University of Oxford, to which is attached a canonry in Christ Church. This professorship he held continuously until his death, and did good service to the cause of Hebrew learning and interpretation. The early associates of Pusey at Oxford were John Henry Newman and R. Hurrell Froude, elder brother of J. A. Froude, the historian. To these should be added Keble, Whately, Jelf, Hawkins, etc. In company with Newman and Froude, Dr. Pusey began, in 1833, that movement in the Church of England which is usually called by its admirers "the Anglo-Catholic movement," and which has had so marked and wide-spread effect upon both doctrine and practice in that Church. Pusey joined with Newman, Froude, and oth-

ers, in preparing and putting forth the somewhat famous "Tracts for the Times"; and though he contributed only four to the series, yet he was looked upon as the leading spirit, and as giving character to the entire movement. He worked efficiently for the end had in view by his elaborate treatise on "Holy Baptism" (1840), his "Letters to the Archbishop of Canterbury" (1842), and to the "Bishops of Oxford and of London" (1851), and his numerous single sermons and pamphlets. The party badges, "Puseyite" and "Puseyism," were coined and vigorously employed, and though Dr. Pusey earnestly protest-



EDWARD BOUVIERE PUSEY, D. D., D. C. L.

ed against this use of his name, as if he were the originator of a new sect in the Church, yet the epithets were persistently applied, and have continued to hold their place in current religious literature. On the publication (1841) of Newman's "Tract No. 90" (the last of the series), which taught that subscription to the Thirty-nine Articles of the Church of England may be made by any clergyman who maintains his right to interpret them according to "Catholic" doctrine, Dr. Pusey was called upon to defend Newman's course and views. This he did in a letter to Dr. Jelf (1841), which excited much attention at the time. In 1843 he preached a sermon before the university in which he advocated the doctrine of the real presence in the Lord's Supper. For this sermon he was brought before a board of judges, under a university statute, was condemned by them as holding substantially the Roman dogma of transubstantiation, and was suspended from the office of university preacher for three years. Although on most intimate terms with New-

man, Dr. Pusey did not join the latter in his secession to the Roman obedience in 1846, but remained in his place in the Church of England. Possessing wealth and its advantages, he gave his best energies to the guiding the Anglo-Catholic revival. The success of this great movement, which is patent to all observers, was largely due to Dr. Pusey's high and deserved reputation for piety, purity of purpose, and learning; and the strength of the High Anglican or Ritualistic party in England is now greater than it has ever been since Archbishop Laud's and the non-jurors' days. Dr. Pusey was not only a diligent student, but also published a large number of volumes during his long connection with the University of Oxford. He was one of the editors of the "Library of Translations from the Fathers," and of the "Anglo-Catholic Library," and adapted for use among English Church people a number of Roman Catholic books of devotion, such as Scupoli's "Spiritual Combat," Surin's "Foundations of Spiritual Life," St. Anselm's "Prayers and Meditations," etc. His chief publications were: "Causes of Rationalistic Character

of Theology in Germany" (1828); "Remarks on the Benefits of Cathedral Institutions" (1833); "Parochial Sermons" (8 vols., 1848-'69); "Marriage with a Deceased Wife's Sister" (1849); "The Royal Supremacy not arbitrary," etc. (1850); "The Doctrine of the Real Presence, as contained in the Fathers" (1855); "The Real Presence the Doctrine of the English Church" (1857); "History of the Councils of the Church, A. D. 51-381" (1857); "The Minor Prophets, with Commentary," etc. (1860-'62); "Letter on the Essays and Reviews" (1861); "Daniel the Prophet," nine lectures (1864); "The Church of England a Portion of Christ's one Holy Catholic Church, and a Means of restoring Visible Unity, an Eirenicon," a letter addressed to John Keble, and in reply to Manning's letter to Pusey (1865); "A Letter justifying holding Confessions for Forty Years past" (1878); "What is of Faith as to Everlasting Punishment? In reply to Dr. Farrar's Challenge, in his 'Eternal Hope'" (1880); and "Parochial and Cathedral Sermons" (1882), collected and issued just before his death.

## R

### RAILROADS OF THE UNITED STATES.

Statistics relating to the railroad corporations of the United States, their financial condition, business operations, etc., were first collected by the national Government in 1880, and are now reported by the tenth census. The returns show that on June 30th of that year there were

in the United States 1,482 companies, 87,891 miles of completed road, 10,016 miles under construction, and 41,029 miles projected. The average (cost, value, and amounts), per mile of road completed and operated, of assets and liabilities, earnings, income, expenses, profit, dividends, and balance retained were as follow:

ITEM.	Amount.	Average per mile of road completed and operated.
Cost of construction of roads .....	\$4,112,367,176*	\$47,887†
Cost of equipment .....	418,045,458	4,817
Value of lands owned (including buildings) .....	108,319,845	1,191
Value of telegraph lines and miscellaneous .....	204,918,196	2,361
Stock and bonds owned (issued by other companies) .....	848,800,182	8,962
Total permanent investments .....	\$5,182,445,807	\$59,718
Cash assets .....	358,973,981	4,079
Profit and loss to credit .....	\$110,697,228	\$1,275
Total permanent and cash assets .....	\$5,536,419,788	\$63,797
Capital stock paid in .....	\$2,618,606,264	\$30,117
Funded debt .....	2,890,915,402	27,551
Total stock and funded debt .....	\$5,004,521,666	\$57,668
Unfunded debt .....	421,200,894	4,854
Total capital paid in and borrowed .....	\$5,425,722,560	\$62,522
Gross transportation earnings .....	\$580,450,594	\$6,689
Total income (all sources) .....	661,295,391	7,620
Transportation expenses .....	352,800,120	4,065
Total expenditures (all classes) .....	541,950,795	6,245
Net transportation earnings .....	227,650,474	2,628
Net income or profit .....	119,344,596	1,375
Dividends declared .....	70,650,842	813
Amount retained .....	48,794,254	562

\* This amount includes funds expended upon partly completed miles of road under construction. It was impossible to obtain from railroad companies the respective amounts paid out for an exact number of miles entirely completed.

† Average taken upon 86,732 miles of road operated by the companies reporting transportation earnings.



INCOME OF.—The aggregate income is shown in the following exhibit:

ITEM.	Amount.	Total.	Aggregate.
Gross transportation earnings.....		\$580,450,594	
Income from all other sources—rents.....	\$58,548,710		
Income from all other sources—interest and dividends.....	27,801,087	80,844,797	\$661,295,891
Less:			
Transportation expenses.....	\$852,800,120		
General expenses of lessor companies.....	1,879,848		
Interest on funded debt.....	126,442,810		
Interest on unfunded debt.....	9,087,798		
Rentals.....	51,790,719		
		\$541,950,795	
Deduct expenses over earnings.....	\$1,427,581		
Deduct expenses over other income.....	18,286,921	14,714,502	527,286,293
Net income or profit reported by companies having no deficits.....			\$184,059,098
Dividends declared:			
On preferred stock.....	\$6,893,268		
On common stock.....	63,657,079		
		\$70,550,342	
Deduct dividends declared by companies having no net income.....		529,974	70,020,868
Balance retained.....			\$64,088,780*

ASSETS OF.—The aggregate assets and liabilities appear in the following balance-sheet:

ASSETS.			LIABILITIES.		
Item.	Amount.	Total.	Item.	Amount.	Total.
Construction of roads.....	\$4,112,867,176		Capital stock paid in—preferred.....	\$904,471,942	
Equipment.....	418,045,458		Capital stock paid in—common.....	2,309,184,322	\$2,618,606,264
Lands.....	108,819,845				2,890,915,402
Stock (of other companies).....	184,866,527		Funded debt.....		
Bonds (of other companies).....	158,988,605		Unfunded debt:		
Telegraph lines and miscellaneous.....	204,918,196		Interest unpaid.....	\$68,750,288	
Total permanent investments.....		\$5,182,445,807	Dividends unpaid.....	18,059,968	
Cash.....	\$61,211,518		Notes payable.....	85,573,270	
Bills receivable.....	81,064,428		Vouchers and accounts.....	256,817,368	421,200,894
Due from agents and companies.....	79,814,155				
Materials and supplies.....	44,294,901		Profit and loss (reported by others).....		288,191,598
Sinking fund.....	20,488,759		Total liabilities.....		\$5,658,914,158
Debit balances.....	117,100,225				
Total cash and other assets.....		858,978,981			
Profit and loss (reported by some companies).....		122,494,870			
Total assets.....		\$5,658,914,158			

EARNINGS.—The aggregate transportation earnings were:

ITEM.	Amount.		Total.	
		Per cent.		Per cent.
Local passengers.....	\$98,321,340	68·28		
Through passengers.....	44,514,898	80·89		
All other passengers.....	1,265,976	0·88		
Total.....		100·00	\$144,101,709	24·83
Express.....			8,828,259	1·52
Mails.....			10,472,818	1·80
Local freight.....	\$283,688,202	56·16		
Through freight.....	176,909,181	42·51		
All other freight.....	5,548,425	1·33		
Total.....		100·00	416,145,758	71·69
Earnings not analyzed.....			902,055	0·16
Aggregate.....			\$580,450,594	100·00

EXPENSE OF TRANSPORTATION.—The following statement exhibits the aggregate transportation expenses:

\* Against this balance stand the deficits of other companies, \$15,244,476.

ITEM.	Amount.	Per cent.	Per cent of earnings.
Repairs of road-bed and track.....	\$39,608,076	11.23	6.82
Renewals of rails.....	17,243,950	4.89	2.97
Renewals of ties.....	10,741,577	3.04	1.85
Repairs of bridges.....	9,009,097	2.55	1.55
Repairs of buildings.....	7,644,121	2.17	1.32
Repairs of fences, crossings, etc.....	1,480,926	0.42	0.25
Telegraph expenses.....	8,576,477	1.01	0.62
Taxes.....	13,288,819	3.77	2.29
Total maintaining road and real estate.....	\$102,583,043	29.08	17.67
Repairs of locomotives.....	\$21,830,968	6.19	3.76
Repairs of passenger, baggage, and mail cars.....	10,553,824	2.99	1.82
Repairs of freight-cars.....	22,595,558	6.40	3.89
Total repairs of rolling-stock.....	\$54,985,340	15.58	9.47
Passenger-train service.....	\$10,046,080	2.85	1.78
Passenger-train supplies.....	1,148,810	0.33	0.20
Passenger-car mileage.....	807,525	0.23	0.14
Freight-train service.....	19,892,843	5.64	3.43
Freight-train supplies.....	1,260,965	0.36	0.22
Freight-car mileage.....	7,781,838	2.21	1.34
Fuel for locomotives.....	32,836,470	9.31	5.66
Water-supply.....	2,388,867	0.68	0.41
Oil and waste.....	8,754,670	1.06	0.65
Locomotive service.....	27,239,568	7.72	4.69
Agents and station service.....	36,767,299	10.42	6.83
Station supplies.....	2,571,938	0.81	0.49
Salaries of officers and clerks.....	12,215,580	3.46	2.10
Legal expenses.....	2,457,905	0.70	0.42
Insurance.....	926,694	0.26	0.16
Stationery and printing.....	2,692,011	0.76	0.47
Outside agencies and advertising.....	4,787,811	1.34	0.82
Contingencies and miscellaneous.....	21,328,836	6.04	3.67
Loss and damage, freight.....	974,526	0.28	0.17
Loss and damage, property and cattle.....	1,103,761	0.31	0.19
Loss and damage, personal injuries.....	1,377,978	0.39	0.24
Expenses not analyzed.....	621,077	0.18	0.11
Total operating and other expenses.....	\$195,281,737	55.84	38.63
Aggregate transportation expenses.....	\$352,800,120	100.00	60.78
Net earnings.....	\$229,078,055	.....	.....
Less expenses over earnings by some companies.....	1,427,581	.....	.....
Total.....	\$227,650,474	.....	39.22

NET EARNINGS.—The disposition of net earnings is shown by the following statement:

Net earnings.....	\$229,078,055
Less expenses over earnings.....	1,427,581
Net earnings of whole system.....	\$227,650,474
Paid:	
Fixed charges, less income from other sources than earnings....	\$187,270,827
	80,844,797
General expenses of lessor companies.....	1,879,843
Total.....	\$106,426,080
Dividends declared.....	70,550,342
Total expended.....	\$178,856,220
Balance held, whole system.....	48,794,254
Total.....	\$227,650,474
Actual balance reported by some companies as surplus.....	\$64,033,730
Deficits reported by others.....	15,244,476
Net balance for system.....	\$48,794,254

Of the 1,016 companies which report an income (whether operating, lessor, or otherwise), 666 obtained a net income aggregating \$134,059,098, and 350 report none whatever.

There are 1,165 companies which report an aggregate capital stock (paid in) amounting to \$2,613,606,264, of which 623 have earned a net

income or a profit upon their stock. The balance of 542 companies earned no profit whatever; 373 of the latter created deficits or had their income balanced by expenditures, and 169 companies had not yet commenced operations, their roads being under construction.

The net income or profit available for dividends upon stock of these 623 companies (\$2,103,068,246, or 80 per cent of the aggregate for the United States) amounts to \$132,989,336, and is an average per cent of profit upon such stock of 6.32.

The balance of stock is that which bears no profit, and amounts to \$510,538,018, or nearly 20 per cent of the aggregate report for the country. Of this amount \$449,905,903 is stock of companies having deficits, or having their income balanced by expenses, and \$60,632,115 is stock of companies whose roads are yet under construction.

PROFIT PER CENT.—The average per cent profit, upon both capital stock paid in and funded debt, was:

Capital stock and funded debt.....	\$5,004,521,666
Total income.....	661,295,391
Total expenditures, less interest on funded debt.....	415,503,485
Net income or profit.....	245,786,906

The above shows the income to be 13.21 per



cent of stock and funded debt; expenditures, less interest on funded debt, 8.30 per cent of stock and funded debt; net income or profit, 4.91 per cent of stock and funded debt. If those companies are only taken which report net income, and those which report deficits are excluded, then the net profit upon the stock and funded debt of such companies in the United States will average 5.2 per cent. The financial results are:

Gross earnings.....\$580,450,594  
Transportation expenses.....352,800,120

Net earnings.....\$227,650,474  
Less fixed charges and general expenses of lessor companies, reduced by income from all other sources than earnings.....108,805,878

Amount available for dividends.....\$119,844,596

Stock (preferred and common).....\$2,613,606,264  
Per cent earned upon stock.....4.566  
Per cent declared upon stock.....2.699  
Per cent held.....1.867

**MILEAGE STATISTICS.**—The following are revenue train mileage statistics of the railroad system of the United States:

Total miles of road operated.....86,792  
Earnings per mile.....\$6.688  
Expenses per mile.....4.065  
Net earnings per mile.....2.623

Freight-trains:.....251,022,710  
Earnings per mile.....\$1.65  
Expenses per mile.....93  
Profit per mile.....67

Passenger-trains:.....138,225,621  
Earnings per mile (including express and mails).....\$1.18  
Expenses per mile.....76  
Profit per mile.....43

**FREIGHT AND PASSENGERS.**—The details of the freight and passenger traffic are as follows:

Freight tonnage: Number of tons carried....290,897,895  
Average miles hauled.....111  
Tons, one mile.....32,348,846,693  
Revenue.....\$416,145,758  
Receipts per ton per mile....1.29 cents.  
Cost per ton per mile.....0.76 cents.  
Profit per ton per mile.....0.53 cents.

Passengers: Number carried.....269,583,340  
Average distance.....23 miles.  
Passengers carried one mile....6,159,240,914  
Revenue.....\$144,101,709  
Receipts per passenger per mile.\* 2.38 cents.  
Cost per passenger per mile.....1.71 cent.  
Profit per passenger per mile....0.61 cent.

Freight traffic: Tons carried, local.....153,163,276  
Tons carried, through.....187,513,992

Tons carried, total†.....290,897,895

Passenger traffic: Passengers, season‡.....28,665,251  
Passengers, local.....244,178,377  
Passengers, through.....25,404,963

Passengers, total.....269,583,340

Freight tonnage: \$ Local.....14,252,169,778  
Through.....13,075,963,632

Revenue: Local.....\$233,688,206  
Through.....192,457,554

Average rate per mile: Local.....1.64 cent.  
Through.....1.01 cent.  
Local and through...1.29 cent.

Passengers carried one mile are not separately specified for local and through.

**EQUIPMENT.**—The equipment of all the roads in the United States comprised 17,412 locomotives, 12,330 passenger-cars, 4,475 mail, express, and baggage cars, 375,312 freight-cars, and 80,183 other kinds of cars; cost of equipment, \$418,045,459. The aggregate number of all employés was 418,957; amount of yearly pay-rolls, \$195,350,013.

**ACCIDENTS.**—The following is a condensed summary of the reported accidents on all the roads in the United States during the census year:

TO WHOM HAPPENED.	Through causes beyond their control.		Through their own carelessness.		Aggregate.		Total accidents.
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	
Passengers.....	61	331	82	213	143	544	687
Employés.....	260	1,004	668	2,618	923	3,617	4,540
All others.....	43	108	1,429	1,945	1,472	1,451	2,923
Unspecified.....	...	...	...	...	3	62	65
Total.....	364	1,488	2,174	4,174	2,541	5,674	8,215

**RED-CROSS SOCIETIES AND THE LAWS OF WAR.** Many attempts have been made to bring about an international agreement for mitigating the horrors and mortality of battle, since the improvements in the rifle and the adoption of universal military service have rendered war so much more calamitous and fatal than in former times. The first successful movement of this kind was started at the same time that the civil war was raging in the United States.

**CONFERENCES.**—A conference of jurists and others interested in this object was held in Geneva in 1863. The Government of Switzerland approved of the project for an international compact which they drew up, and the potent support and sanction of the French

Empire were won. At a second conference the ten articles of the Geneva Convention were signed, August 22, 1864, by plenipotentiaries of France, Prussia, Italy, Spain, Holland, Belgium, Denmark, Sweden, Switzerland, Portugal, Württemberg, Baden, and Hesse-Darmstadt. This convention "for the amelioration of the condition of the wounded of armies in the field" imposes upon the victorious army the duty of caring for the enemy's wounded, and protects all surgeons and nurses and their hospital stores and materials. Military and field hospitals, in which wounded are cared for, are made neu-

\* Not including express or mails.

† This amount includes 220,127 tons of companies which omitted to specify them as through or local.

‡ Included in amount of local.

§ Of freight tonnage 20,713,261 tons were left unspecified.

tral, and all the attendants are to be free from molestation; non-combatants bringing help to wounded are not to be hindered, and houses where wounded are must not be disturbed. The permanently disabled are to be released and allowed to return to their own country. In 1865 Great Britain, Turkey, Greece, and Mecklenburg-Schwerin accepted the conditions of the convention; in 1866 Austria, Bavaria, and Saxony joined the other nations, Russia in 1867, and the Pontifical States in 1868. In the latter year fifteen other articles, extending the provisions of the convention to naval warfare, and enlarging the rights of the sanitary *personnel*, sick, and wounded, as neutrals, were added. The majority of the states, however, refused to ratify these supplementary articles. The badge by which the neutralized persons and places were to be recognized, the Swiss flag with the colors reversed, was stated in the articles of the compact. It is a red cross on a white ground. This symbol protects not only the regular hospital service of the belligerent armies, but volunteer nurses and surgeons. Societies of the Red Cross were formed in the different countries of Europe, and, in the tremendous wars which followed the conclusion of the humane compact, the governments found in the volunteer corps which gathered at the seat of war from the various countries of Europe an invaluable aid to their sanitary departments. The St. Petersburg declaration of November 16, 1868, was a corollary to the Geneva Convention. It forbids the use of certain kinds of explosive shot as unnecessarily deadly, on the principle that the legitimate aim of warfare is to cripple the military resources of the enemy merely, and consequently weapons which destroy life and maim, when slighter wounds would be equally effective in disabling the enemy, are inhumane and illegitimate. Fifteen European states agreed to the proposition of the Russian Government, including all the great powers, besides Turkey and Persia. In 1874 Persia, Roumania, and San Salvador subscribed to the Geneva Convention; Montenegro in 1875; Servia in 1876; the Argentine Republic, Bolivia, and Chili in 1879; and Peru in 1880.

**ORGANIZATION COMPLETED.**—An international organization was completed and cemented at a conference of Red-Cross societies held at Berlin in April, 1869. Measures were adopted with regard to the establishment of national societies in the different countries and their relations to the military authorities, and to provisions for the service in war-time, and the technical preparation and equipment. The international association embraced in its objects also the relief of the injured and suffering in calamities occurring in time of peace. A quarterly bulletin, published at Geneva, was established as the official organ of the association. The central control of the organization is vested in an international committee permanently established at Geneva. The national

societies and their branches, recognized by their several governments, receive credentials from this committee to the authorities of the belligerent states when they engage in the active work of the association in time of war. The International Committee consists of seven members. The president, Gustave Moynier, has held that office since the first organization of the association in 1863.

**OBJECTS.**—The original object of the association, the reform of the laws of war in the direction of greater humanity, has been abandoned for the magnificent field of practical work which was opened by the results of its original efforts. The theoretical aims were made the special task of an allied organization, the *Institut de Droit International*, which was founded by some of the men who gave the first impulse to the movement. The *Institut* published in 1880 a manual of the laws of war, revised in accordance with the newly accepted doctrines, which met with a favorable reception in some countries, notably in Russia, France, Belgium, and the Netherlands. The eminent Bluntschli, lately deceased, besought on behalf of the society the approval of Field-Marshal Moltke for the new code, and received, in the early part of 1881, a remarkable reply. The great German strategist eulogized war as "an element in the order of the world ordained by God," in which the noblest virtues, courage, self-abnegation, and faithfulness to duty are developed, and without which "the world would stagnate and lose itself in materialism." He declared that an international code of war can have no sanction or authority to execute it, and the only safeguards against the excesses of soldiery are discipline and an adequate commissariat maintained on the part of the government, and the religious, moral education of soldiers, and honor and sense of justice of commanders. The proposition that an invading army should take only "in proportion to the resources of the country" he declared impossible to carry out. He expressed disagreement with the declaration of St. Petersburg, believing that the more terrible the engines of destruction, and the sharper and shorter the conflict, the better for the nations engaged. The position of the reformers on the mooted question of the belligerent rights of irregular forces, volunteer corps, and those who take up arms "spontaneously" to defend their homes, the German commander could not be expected to accept after the relentless reprisals which were taken upon these classes of combatants during the French invasion. The Swiss, who have from ancient times owed their independence to their volunteer organizations, and the Norwegians, who are proud of their *Landstorm*, and hold the right of bearing arms to be the guarantee of popular liberty, are specially desirous to secure the recognition of volunteer bodies. They agree that these forces should be under the orders of the regular commanders, and that they should wear some distinguishing



uniform or badge. The establishment of the rights of people who rise in a mass to repel invasion is more hopeless, and all the nations of Europe will probably be forced to maintain a general *Landwehr* organization.

**PROPOSITIONS.**—In 1874 a further proposal to extend the provisions of the Geneva Convention emanated from the Russian Government. In the conference which met at Brussels to consider the propositions presented by Baron Jomini, fifteen states took part. Several of them raised objections to the project of a declaration, which was agreed upon by a majority of the representatives, August 27, 1874; and a new proposition was formulated by the Russian Government in the beginning of 1876. The Russo-Turkish War intervened, and the negotiations were not subsequently resumed; but in that war Russia put into practice certain stipulations of the Brussels declaration which relate to the treatment of prisoners of war.

With the authorization given by these treaties, the association of national Red-Cross societies was founded, and soon grew up to be the most potent and extensive non-religious organization for merciful works known to modern times. Their beneficent activity commenced in the Franco-Prussian War. Many hundreds of volunteer surgeons who did yeomen's service in both camps were maintained by the Red-Cross societies of England, Russia, Austria, Italy, and the smaller states. The German Red Cross established communications with the French, news of the wounded and captive were transmitted to friends across the lines, and the contributions to the French prisoners in Germany were forwarded from France through this agency. The German Central Committee dispensed in their own work during the brief campaign over \$13,000,000. The English Red Cross in the Turkish War displayed great energy and bravery as well as munificence in fulfilling its benevolent mission. The expenditures of the Russian and English societies during that war were enormous. In the decade which followed the definite organization of the international association in 1869, the Red Cross has been active at the scene of conflict in every war where it could receive the protection guaranteed in the treaty—in Spain, Bosnia, South America, South and East Africa, in Central Asia on the Indus, at Cabool, and in the Turkoman steppes, where the Russian volunteer sanitary column took under its protection the Turkoman women and children who were being ruthlessly massacred by the Russian soldiery in revenge for the courageous defense of Geok Tepe.

**SOCIETIES.**—The organization of the Red-Cross societies and their relations to the state and military authorities are very different in the various countries notwithstanding the efforts made at the conference of Berlin to establish definite and uniform rules. The Netherlands Society, which, like the English, has

been particularly active in practical work—in the Caucasus, South Africa, and Acheen—was founded by the King, and occupies a semi-official position, being placed under the control of the Ministry of War, and receiving an allowance from the military budget. In the other countries where the societies were initiated by the governments, the relations to the military authorities are close. In Sweden the first president of the society was the Crown Prince, the present King, and the organization is under the patronage of the Marine Department. In Spain the society was founded by Queen Isabella in 1864, and amalgamated with the order of the Knights of Saint John. In Italy also, as well as in Austria, England, Prussia, and elsewhere, the orders of Saint John or of Malta united with the Red Cross, which, under the patronage of the King, attained a high degree of organization and established regular relations with the army. In France the Red Cross was founded in 1864, and promoted by Napoleon III. In the war of 1870 it was more efficient than the sanitary department of the army. It has a highly developed and centralized organization, and is composed of about one hundred different branches attached to the military districts and adapted to special objects. In Belgium, where much has been done for sanitary science, and in Switzerland, where the Red Cross originated, the organization and development of the societies have made little headway. In Russia the women took an active part in establishing the Red-Cross societies. These attained an extraordinary development during the Turkish War, and have since been very active in the Asiatic campaigns. The central organization has no organic connection with the army, but the workers of the society are welcomed and aided by Russian commanders. In Germany and Austria the organization is highly developed, and enjoys an officially recognized position, with the advantage or disadvantage of official inspection and regular relations with the Ministry of War. In Austria-Hungary, as well as in Russia, and, to a greater or less extent, in Italy, England, Belgium, the Netherlands, and the Scandinavian countries, the ladies were prominent in the development of the societies. In England, which has contributed greater actual services under the Red Cross than any other country, and with greater disinterestedness, there is no centralized organization. In the great European wars three separate associations directed the work of benevolence—the National Society of the Red Cross, the Order of St. John, and the Stafford House Committee. The first two have branches corresponding to the plan adopted by the international congress, but lack a central control.

**POSITION OF THE UNITED STATES.**—The United States was the only great power remaining which did not officially recognize the rights to special protection secured to the bearers of the Red-Cross symbol, and which did not possess a national society. Yet the most magnifi-

cent example of voluntary sanitary service in all history was displayed during the civil war, when seven thousand societies engaged in the work, and the Sanitary Commission dispensed over \$20,000,000, besides the contributions of the individual societies. The improvements in military sanitation developed in the American war, principally by this volunteer organization—the means of speedy treatment, and of averting hospital infection, such as the field hospitals, and hospital tents, cottage hospitals, etc., the ambulance system, convalescent camps, etc.—were the basis of the whole system of the Red-Cross service, which copied also the intelligence bureaus and other features of the work of the Sanitary Commission.

The conferences at Geneva were attended by the United States Minister to Switzerland, but, pending the war of secession, the American Government was unwilling to join in the agreement. The principles of the treaty were practically observed in the American war, and the magnificent services of the volunteer sanitary organizations were a cheering example to the humane persons who were striving in this cause in Europe. Since then the International Red-Cross Association has several times appealed to the United States Government to join in the compact, but the delicate questions of maritime law involved in the treaty, and other political considerations, have hitherto deterred the Federal Government from taking the step. In the autumn of 1881 a final effort was made to gain the agreement of the United States to the stipulations of the convention of Geneva, and assurances were given by President Arthur of his willingness to accede. The President and the Senate subsequently ratified the convention; the treaty was signed March 16, 1882. Pending the action of the Government a national society was formed and incorporated under the laws of the District of Columbia, bearing the name of the American Association of the Red Cross. Miss Clara Barton was chosen president of the society. The constitution of the association specifies as its principal object—

To organize a system of national relief and apply the same in mitigating the sufferings caused by war, pestilence, famine, and other calamities.

Another article provides that—

This association shall hold itself in readiness, in the event of war or any calamity great enough to be considered national, to inaugurate such practical measures in mitigation of the suffering and for the protection and relief of sick and wounded as may be consistent with the objects above indicated.

**REFORMED CHURCHES. I. REFORMED CHURCH IN AMERICA.**—This Church is composed of four particular synods, viz.—the Particular Synods of New York, Albany, Chicago, and New Brunswick—with thirty-three classes, which reported to the General Synod in June, 1882, statistics of which the following is a summary: Number of churches, 509; of ministers, 545; of families, 43,611; of communi-

cants, 80,167; of baptized non-communicants, 29,669; number of Sunday-schools, 687, with 84,511 scholars; number of baptisms during the year, 4,051 of infants and 859 of adults. Amount of contributions for religious and benevolent purposes, \$200,248; for congregational purposes, \$902,368.

The several boards having the care of the benevolent enterprises of the Church made reports to the General Synod in June, of which the principal items are as follow:

*Board of Education.*—Total receipts, \$8,670; net indebtedness, \$5,625, against \$7,093 in 1881; number of students aided during the year, 63.

*Board of Publication.*—Receipts from business, \$16,299; profits, \$530; assets, \$11,769. Number of new publications (including official papers and documents), 11.

*Widows' and Disabled Ministers' Fund.*—Total amount of the Widows' Fund, April 30, 1882, \$55,391; amount of income from all sources, \$3,557; cash on hand, \$5,599. Amount of the Disabled Ministers' Fund, \$49,614; amount of receipts during the year, \$4,598; cash on hand, \$3,915.

*Board of Domestic Missions.*—Total receipts, \$29,030; expenditures, \$26,086. Sixty-four missionaries had been employed in 78 missions, of which 37 were in the West and 41 in the East, with, in all, 4,077 families and 5,979 members in communion. Connected with the missions were 89 Sunday-schools, having an average attendance of 8,247 persons. Eleven churches had become self-supporting during the year. The receipts for the Church-Building Fund had been \$9,186; and the expenditures \$11,841.

The receipts of the *Board of Foreign Missions* had been \$58,154. The missions—in India, China, and Japan—comprised 9 stations, 101 out-stations, 16 missionaries, 24 assistant missionaries, 13 native ministers, 39 catechists or preachers, 37 churches with 2,625 communicants, 5 academies, 90 day-schools, with 2,210 scholars, and 14 theological students. The contributions of the native Christians during the year had amounted to \$3,233. The synod decided to ask the churches for \$72,000 for this work during the ensuing year.

The receipts of the *Woman's Board of Foreign Missions* were \$14,662.

The *General Synod* of the Reformed Church in America met in Schenectady, N. Y., June 7th. The Rev. Edward P. Ingersoll, D. D., of Brooklyn, N. Y., was elected president. A resolution was adopted expressing surprise, regret, and solicitude, at the recent legislation of Congress on the subject of immigration from China; and the hope that the Government might be induced soon to reconsider its action, "and to adopt such measures as will be likely to promote good feeling and friendly intercourse between China and our own country, and which will at least not hinder the work of Christian evangelization in that distant



land." In response to a number of memorials on the subject of Masonry, the synod decided to refer all questions in regard to the standing and relations of persons already in communion, and to the acceptance or rejection of applicants for admission, to the several consistories; and further declared that while it felt restrained, by constitutional limitations, from recommending any course that would invade the innocent freedom of speech or of action guaranteed to every church-member by the established law and usage of the Church, it would in the spirit of Christian kindness, while reaffirming previous deliverances on the subject, "advise all the parties concerned to abstain from any associations, and from pursuing any course of conduct, that would furnish a scriptural or reasonable ground of offense to tender consciences, or that would be likely to interfere with the love and confidence that should always be found among the disciples of Christ." A committee of the synod had been engaged in preparing a revision of the translation of the Heidelberg Catechism, with the intention of consulting with a similar committee of the Reformed Church in the United States, for agreement on a common version. The synod directed that the revision be submitted to the theological professors for their approval, and then published in suitable form. In answer to a number of memorials, asking for the substitution of the word "hades" for "hell" in the Apostles' Creed, the synod directed that the word "hades" be placed in a foot-note at the bottom of the page wherever "hell" occurs in the text of the creed. It was determined that the correspondence of the Church with the bodies to which it is accustomed to send fraternal greetings be hereafter conducted by letter, "unless the distance and other circumstances make it entirely convenient for the appointed delegate to represent us in person." Delegates were appointed to convey the greetings of the Church to the Christian Synod of the Reformed Church of the Netherlands, "and the meetings of any other Reformed Churches in Europe which they may visit."

**THE SUBJECT OF THE CREED.**—A memorial from the Classis of Poughkeepsie, asking that the word "saving" be placed before the word "good" in the clause "incapable of doing any good and prone to all evil," of the confession required in the baptismal formula for adults, was vigorously discussed, and was finally referred to a committee of five ministers and two elders, to consider and report upon it at the next meeting of the synod.

**II. REFORMED CHURCH IN THE UNITED STATES.**—This Church, formerly known as the German Reformed Church, is composed of six synods, viz., the Synods of the United States, of Ohio, of the Northwest, of Pittsburg, the Potomac Synod, and the German Synod of the East; with fifty classes, of which the following is a summary of the statistics, as they are given in the "Almanac for the Reformed Church in

the United States" (Philadelphia: Reformed Church Publication Board) for 1883: Number of ministers, 751; of congregations, 1,420; of members, 163,669; of unconfirmed members, 99,732; of persons who communed during the year, 130,542. Number of Sunday-schools, 1,334, with 103,690 scholars; number of students for the ministry, 127; number of baptisms during the year, 12,711 of infants, and 892 of adults. Amount of contributions for benevolent purposes, \$92,936; for congregational purposes, \$666,442.

The Church has fifteen literary and theological institutions, a general board of Foreign Missions, five synodal boards of Home Missions, four synodal boards for Beneficiary Education, a general society for the Relief of Ministers, a mission among the Indians under the direction of the Synod of the Northwest, and fifteen English and six German periodicals.

The receipts for *Foreign Missions* during the year ending July 1, 1882, were \$3,561. The foreign mission is at Tokio, Japan, where one missionary and his wife are employed. The total amount of the contributions of the Church for *Home Missions* during 1882 was \$14,000.

**RHODE ISLAND.** The State officers for the year were as follow: Governor, Alfred H. Littlefield; Lieutenant-Governor, Henry F. Fay; Secretary of State, Joshua Addeman; Attorney-General, Willard Sayles; Treasurer, S. L. Clark.

Among the most noteworthy recommendations made by Governor Littlefield in his second annual message to the Legislature, on January 31, 1882, he urges the necessity of adopting effectual measures to alter the present system of education in the common schools of the State, so "as to fit the present generation of children, and their immediate successors, for the development of the manufacturing and mechanical industries carried on in Rhode Island, as they will furnish the main employment for our people"; adding, "To fit our youth for the greatest success in these pursuits, they should receive a preparation which is now beyond their reach through any of the ordinary channels of education. Not only should good, elementary instruction be provided, but our schools should be put upon the work of cultivating the eye and training the hand. To aid in this work, our children should be taught the elementary principles of physics and mechanics—those powers and factors with which they are to be intimately connected for the greater part of their lives."

As a means of improving the efficiency of the public schools of the State, he recommends "that special care should be taken to secure for them teachers of the requisite ability, training, and culture; the success of public schools in any State mainly depending upon the intelligence, the skill, the enthusiasm, and the moral force of their teachers."

He commends to the serious attention of the General Assembly the propriety of establish-

ing a State Industrial School for the proper care and training of pauper and vagrant children, who, by no fault of their own, are often at tender age cast upon the public for support and education. He testifies that "there is a feeling on the part of many that such children should not be sent to the Reform School or to the Almshouse, but to some school which shall be entirely separate from all pauper or penal influences, and where such children may be trained in such a manner as shall be most likely to save the State from all expense for their support in the future, and from all responsibility for their conduct when they arrive at maturity."

The January session of the Legislature was closed on April 21st. A large number of acts was passed, among which were the following:

"An act for the more effectual prevention of cruelty to children"; "An act in addition to chapter 49 of the Public Statutes 'of the appropriation for public schools'"; "An act making appropriation for the benefit of the Rhode Island School of Design"; "An act providing for the appointment of the Superintendent of Public Schools in the City of Newport"; "An act in amendment of chapter 71 of the Public Statutes 'of the support and discipline of paupers'"; "An act in amendment of chapter 253 of the Public Statutes 'of the State Reform School'"; "An act to establish a State School for the Deaf." It authorizes the State Board of Education to establish a day-school for the gratuitous education of deaf and semi-deaf children, and to pay for the traveling expenses of indigent pupils residing in the State, provided that such expenses do not exceed five hundred dollars a year; and that the annual amount for the support and maintenance of the school does not exceed three thousand dollars. "Two acts in amendment of chapters 7 and 8 of the Public Statutes 'of registering, listing, and returning lists of voters, and of proof of their qualification to vote,' and 'of canvassing the rights and correcting the lists of voters'"; "An act in amendment of chapter 10 of the Public Statutes, section 7 to read, 'The Secretary of State shall provide a sufficient quantity of uniform, self-sealing envelopes, bearing as a device the form of an anchor with the word *Hope* on the outside, for use in the elections of general officers of Representatives in Congress, and of electors of President and Vice-President of the United States.'"

Among the resolutions of a public nature the subjoined were passed: "A resolution for the appointment of a joint select committee to consider matters in relation to changes in the Constitution"; "A resolution instructing the committee on the revision of the Constitution to consider the subject of biennial sessions of the Legislature"; "A resolution to propose an amendment to the State Constitution." After much debate on these matters, the question was finally put to the vote on

March 28th, when all the members of either House, excepting only one Senator and one Representative, adopted the following:

RESOLUTION TO PROPOSE AN AMENDMENT TO THE STATE CONSTITUTION.

*Resolved*, A majority of all the members elected to each House of the General Assembly voting therefor, that the following amendment to the Constitution of the State be proposed to the qualified electors of the State, in accordance with the provisions of Article XIII of the Constitution, for their adoption, to be denominated Article V of Amendments, to wit:

ARTICLE V. The General Assembly may, a majority of all the members elected to each House voting therefor, authorize the qualified electors of the several towns and cities to elect as many delegates to a Constitutional Convention as the said towns and cities are respectively entitled to elect members of both Houses of the General Assembly, and the delegates, when elected, shall assemble in convention at a time and place to be provided by law, and may then revise, alter, or amend the Constitution; but no such revision, alteration, or amendment shall take effect unless, when the same is first submitted to the qualified electors of the State for their adoption in a manner to be provided by law, three fifths of all the said electors voting thereon shall have voted in favor of such revision, alteration, or amendment.

CONVENTIONS.—In preparation for the April election of State officers, the Republicans assembled at Providence on March 16th, and by acclamation renominated all of the incumbents for their respective offices, excepting Willard Sayles, Attorney-General, who declined, on account of his health, to be again a candidate. Samuel R. Colt, of Bristol, was nominated for Attorney-General; Samuel Clark, of Lincoln, was nominated for Treasurer. No platform was adopted by the convention.

The Democratic party of Rhode Island convened at Providence on March 22d, and nominated the following State ticket: Governor, Horace A. Kimball, of Providence; Lieutenant-Governor, J. G. Perry, of South Kingston; Secretary of State, Jonathan M. Wheeler, of Cranston; General Treasurer, George P. Leonard, of Newport; Attorney-General, Amos R. Perry, of Providence.

The following platform was adopted:

It is resolved by the Democrats of Rhode Island in convention:

1. That we are in favor of such a change in the State Constitution as will guarantee equal political rights to all citizens in the United States resident in this Commonwealth, whether of native or foreign birth.

2. We are in favor of reform in civil service.

3. That we are resolutely opposed to any affiliation of the Democratic party with a political faction which has for its cardinal principle repudiation of the public debt, either State or national.

4. That we demand of the national Government the most energetic measures tending to the immediate abolition in Territories of the United States of that relic of barbarism, too long a disgrace to the honor of our country and the civilization of the Christian world—polygamy.

The Greenbackers also held their State Convention at Providence, on March 22d, but no nominations were made.

At the election, in April, the Republican nominees were generally elected. The aggre-



gate number of votes polled for Governor was 15,523, of which Mr. Littlefield received 10,056.

**REORGANIZATION.**—On May 30th the Legislature met again at Newport, "to proceed to the reorganization of the State government for the ensuing year." The Senate was called to order by the Governor, as its usual President, and John B. Sanborn, the last year's presiding officer of the House of Representatives, was re-elected Speaker. A numerous committee, consisting of five members from the county of Providence and three from each of the other counties, together with the Secretary of State and the Clerks of both Houses, was appointed "to count the ballots for Governor and general State officers, and report to grand committee"; which committee, on canvass, made their report to the General Assembly in grand committee on the same day, declaring the officers actually elected, namely: Governor, Alfred H. Littlefield; Lieutenant-Governor, Henry H. Fay; Secretary of State, Joshua M. Addeman; Attorney-General, Samuel B. Colt; General Treasurer, Samuel Clark. All of these officers were legally sworn in immediately afterward.

The following State officers were elected by the General Assembly on May 31st, both Houses having then met again in grand committee for that purpose: State Auditor, Samuel H. Cross; Assistant Attorney-General, Benjamin M. Bosworth, Jr.; State Inspector of Beef and Pork, Henry M. Kimball; State Inspector of Lime, Gilbert E. Whittmore; State Inspector of Scythe-stones, O. E. Chickering; State Inspector of Cables, Joseph P. Morton.

The same grand committee, on May 31st, elected two Associate Justices of the State Supreme Court, Pardon E. Tillinghast and George M. Carpenter. They elected also trial justices, a long list of justices of the peace, sheriffs and clerks of the several counties, members of the State Board of Education to fill vacancies, and notaries public.

The next General Assembly in either House will stand as follows: In the Senate, Republicans 27, Democrats 8; in the House of Representatives, Republicans 68, Democrats 8.

On June 2d the General Assembly adjourned to June 13th, that the legal time prescribed by the statute of Congress for an election of Senator might elapse. Upon their meeting again, on June 13th, Senator Anthony was re-elected for a fifth term.

On the same day both Houses passed "an act to approve, and publish, and submit to the electors a proposition of amendment to the Constitution of this State." The act declared the above-mentioned amendment approved by both Houses; and fixed "the first Tuesday after the first Monday in November, 1882," as the day of election.

Several acts and resolutions of minor importance were passed on June 14th, relating especially to appropriations, and the Newport session was closed on the same day.

**CONGRESSMEN.**—For the November election

in 1882 the Republicans and the Democrats residing within the two congressional districts of Rhode Island severally met in convention at Providence, the former on October 20th, the latter on the 26th, to nominate their respective candidates for Congressmen. All of these four conventions were held, not only in the same city, but also in the same room—the Slade Hall, the convention for the second district having begun its work immediately after the first had adjourned, the delegates to the former waiting for the departure of those of the latter, to occupy the chairs vacated. The Republicans from either district unanimously re-nominated the incumbents, namely, Henry J. Spooner, of Providence, for the First District; and Jonathan Chace, of Lincoln, for the Second District. The Democrats as unanimously nominated Oscar Lapham, of Providence, for the First District; and Jonathan M. Wheeler, of Cranston, for the Second District.

**COLORED VOTERS.**—The colored voters of Rhode Island, who have long complained of the treatment which they have steadily received at the hands of the Republican party in the State—they being unrecognized as citizens, neglected, and totally ignored in regard to their political rights, excepting that of suffrage, which is eagerly sought for—asssembled in convention at Newport on the 18th of October, 1882, to express and make publicly known their sentiments. About fifty delegates from the various parts of the State attended this convention, a large number of other colored men being also present as interested spectators. Several public speakers of high repute among them addressed the convention, set forth in plain language, besides other causes of complaint, that the colored voters were highly insulted by the party in power, as they were considered not worthy being voted for by any of the public offices in the gift of the people; declaring also that henceforward they intended to act independently of the Republican party on all political occasions, but vote for the person, whatever the party to which he might belong, who would recognize them as citizens.

An "address to the people," recounting their grievances, together with a series of resolutions, was unanimously adopted by this convention, the resolutions being as follow:

*Resolved*, That the Republican party of our State has failed to properly recognize the worthiness and faithful devotion of its colored adherents; that it continues to do so in the face of earnest but respectful remonstrances.

*Resolved*, That while we cling to those principles which have made the party acceptable to the people, and would adhere steadfastly to its nominations, we affirm our determination to support that person, let him be allied to whatever party he may be, if he shall convince us that he has the most regard for our rights and feelings as citizens of the State.

*Resolved*, That we demand common respect, and a fair representation in the apportionment of prominent and other offices; not simply because of the money considerations that usually accompany office, but that it may be seen that our class is respected and deferred to as are other citizens.

*Resolved*, That we will hold in contempt, as a traitor to manhood and his race, that man who will permit his vote to be influenced by a tender of money or any other corrupting influence.

The colored people of the State numbered 6,271 in 1875, and 6,592 in 1880.

**ELECTIONS.**—At the election held on the 7th of November, the two Republican nominees were elected members of Congress.

The amendment to the Constitution of the State was rejected. The votes approving the amendment, instead of being three fifths, were much less than one half of the whole number cast upon it throughout the State. In almost every town the nays were more numerous than the yeas, as follows: for the amendment, 4,393, and 5,125 against it.

**FINANCES.**—The State debt on December 31, 1881, amounted to \$2,521,500; at the same date in 1882, it was \$1,606,500, as much as \$952,000, which fell due on the first day of September, having been paid.

The receipts and expenditures during the year 1882 were as follow:

Receipts.....	\$688,419 84
Balance in the Treasury on December 31, 1881..	210,789 90

Total.....	\$1,099,209 24
Expenditures .....	774,289 80

Balance in the Treasury on January 1, 1883. \$324,919 44

The deposits in the savings banks, on the 28th of November, 1882, amounted to \$50,657,-876.80, including \$187,067.49 of surplus profits on hand; which shows in the said deposits an increase of \$1,548,948.37 over those of 1881. The whole number of depositors in November, 1882, was 112,472, showing also an increase of not less than 9,481 over their number in the preceding year.

**EDUCATION.**—The present condition of education in Rhode Island, with regard to the number and kind of her school-houses, the number of children of school age, and their attendance, is quite satisfactory.

**STATE INSTITUTIONS.**—The charitable, reformatory, and penal institutions supported by the State, and now grouped together at Cranston, upon the land known as "the State Farm," are also under excellent management and realize the purposes for which they have been established. The number of these institutions and of their respective inmates, on December 31, 1882, was as follows: "Asylum for the Insane, 305; Workhouse and House of Correction, 252; Almshouse, 221; Sockanosset School for Boys, 138; Oaklawn School for Girls, 24; State-Prison, 94; and Providence County Jail, 129; in all, 1,163. Adding the number of officers with their families, residing at the institutions, the total population is about 1,250."

The Governor states the increase in the number of insane persons at the asylum to have been alarming for these several years, and that in 1882 this increase was two thirds larger than in 1881, the insane patients reported at the close of the said two years having been 303 and 281 respectively.

**RAILWAYS.**—The railway lines have transacted during 1882 a considerably larger amount of business, in both passenger and merchandise transportation, than during the previous year—the total number of passengers in 1882 having increased to 3,822,220, and that of tons of merchandise to 672,391. The general expenses incurred by them, however, the Railroad Commissioner states to have so far increased during the year that in their net earnings there has been a decrease of \$244,869.75.

"Thirty-one accidents have occurred on these railroads during the year 1882, by which fourteen lives were lost, and twenty-two persons were injured."

No additional mileage has been made during this year to the tracks of the railroads in the State.

**RICE PRODUCTION OF THE UNITED STATES IN 1879.** The production of rice, in the several rice-growing States, for the year 1879, and the average yield to the acre, as returned by the census of 1880, were as follow:

STATES.	Acres.	Pounds.	Average yield per acre (pounds).
Alabama.....	1,579	510,889	514
Florida .....	2,551	1,294,677	508
Georgia.....	84,973	25,369,687	725
Louisiana .....	42,000	23,188,311	552
Mississippi.....	8,501	1,718,951	491
North Carolina.....	10,346	5,609,191	517
South Carolina.....	78,888	52,077,515	664
Texas.....	385	62,152	156
Total.....	174,173	110,181,378	632

**RODGERS, JOHN**, Rear-Admiral United States Navy, born in Harford County, Md., August 8, 1812; died in Washington, D. C., May 5, 1882. In his sixteenth year he was appointed midshipman from the District of Columbia, and joined the Mediterranean squadron in the frigate *Constellation*, under the command of his father, Commodore Rodgers. In 1832 he went to the Naval School at Norfolk, Va., and two years later passed his examination and became a passed midshipman. He then spent a year of study in the University of Virginia. From 1836 to 1839 he served on the Brazilian squadron, when he took command of the schooner *Wave* on the Florida coast. He was made lieutenant January 22, 1840, and assigned to the command of the schooner *Jefferson*. He was now occupied in hydrographic work among the Florida Keys, and in conducting hostilities against the Seminole Indians. He joined the Mediterranean squadron again in 1846, and remained there for nearly two years. During the three following years (1849-'52) he was again on duty on the coast of Florida, in fixing the position of shoals, reefs, etc., in ascertaining the direction of currents, and in preparing charts.

In 1852 Lieutenant Rodgers joined the squadron which formed the Northern Pacific



Survey Expedition, under Commander Ringgold, and succeeded to the command when in the China Seas. His surveys of the Ladrone Islands, Loo-Choo, and other islands, added much valuable knowledge and increased the safety of navigation in those seas. In 1855 he sailed from Kamchatka, in the Vincennes, through Behring Strait into the Arctic Ocean, for the purpose of verifying the position of lands plotted by British officers on the Admiralty charts. He then sailed westward in search of the land plotted by Admiral Wrangel, but was turned back by ice-barriers. His return was occupied in marking his zig-zag course by line of soundings on the chart of "Behring Sea and the Arctic Ocean." This chart was published by the Government, and added to Rodgers's well-earned reputation. He reached San Francisco in October, 1855, and was gazetted with his officers by the Navy Department.

On the breaking out of the civil war, Commander Rodgers was sent West to superintend the construction of the Benton class of iron-clads. Desiring more active duty, he was placed in command of an expedition of gunboats, which he led (May 15th) to the famous attack on Fort Darling. His courage and skill were shown on many occasions, on one especially, when, in the monitor Weehawken, he captured, after a very brief engagement, the rebel ironclad Atlanta, in Warsaw Sound, Georgia, a vessel much his superior in tonnage and force. His most famous voyage was in the monitor Monadnock, which, under his command, navigated the Atlantic and Pacific, passing through the Straits of Magellan, and reaching San Francisco in safety.

Commodore Rodgers was particularly serviceable in the harbor of Valparaiso, where he succeeded in preventing a bombardment of the city by the Spanish fleet. His tact, judgment, firmness, good sense, all deserve praise, and received high commendation from the Government. In December, 1866, he was assigned to the command of the Charlestown Navy Yard; he was made rear-admiral December 31, 1869; and early in 1870 took command of the Asiatic fleet. His expedition to Corea and his prompt measures against the treachery of the natives showed those savages very plainly that the United States would never submit to outrage on their part with impunity.

On finishing his Asiatic cruise, Admiral Rodgers was made commandant of Mare Island Navy Yard, California, since which time he has been in charge of the Naval Observatory. Having received the thanks of Congress, his official life was prolonged beyond the prescribed age. He took an active interest in all that related to the service in which the best years of his life had been spent. He became a member of the Light-House Board in May, 1878, and was elected chairman to succeed Professor Henry. He died full of years, and was honored and esteemed by all who came in contact with him,

for his many noble and excellent qualities of both head and heart.

**ROMAN CATHOLIC CHURCH.** The earliest important official acts of Pope Leo XIII in the year 1882 were a series of beatifications, by which the public invocation and the exposition of the pictures of personages whose lives and miraculous powers had been duly investigated, were permitted in certain districts or to certain orders. These were, Blessed Alphonsus de Orosco, Hermit of the Order of St. Augustine, born at Oropesa, Spain, October 15, 1500, preacher to Charles V, and a theologian of high rank, beatified January 15th with solemn ceremonies in the Aula of the Canonization; Blessed Charles da Sezze, a Franciscan lay brother, known in the world as John Charles Marchione, born at Sezze, October 22, 1613, died January 6, 1670, beatified January 22, 1882; and Blessed Humilis da Bisignano, also a Franciscan lay brother, known in the world as Luke Anthony, born at Bisignano, in Calabria, August 25, 1582, died there October 26, 1637, beatified January 29, 1882.

**AN ENCYCLICAL.**—In an encyclical, dated February 15, 1882, and addressed to the archbishops and bishops of Italy, Pope Leo XIII, after reviewing the increasing assaults on religion and the spread of antichristian ideas, urges them to labor to counteract them: "In order to nourish and increase awakened virtue, it is necessary to see and provide that societies may be increased and flourish, in number, co-operation, and good accomplished; that the main object of these societies should be to maintain and arouse faith and other Christian duties. To this class belong associations of youth, of artisans, those intended for assembling Catholics at stated times, societies for the relief of the poor, for the observance of holy days, instruction of the children of the poor, and the like. And as it imports in the highest degree for the Catholic weal that the Roman Pontiff should be, and be known to be, free from all peril, annoyance, and difficulty, let these associations strive, by remonstrances, and by every form of action within the law, for the cause of the Pope. Let them endeavor and do, nor take rest till there is restored to us that liberty in fact, and not in figure, with which, as in a compulsory bond, is joined not only the Church's good, but a favorable course of Italian government and the tranquillity of Christian nations." He urged the daily or most frequent dissemination of sound principles and doctrines to oppose the flood of irreligious and communistic theories constantly offered to the unwary. Cardinal rules are given for writers. The bishops are urged also to renewed care in the due training of candidates for the priesthood in properly organized seminaries.

A form long in use, by which certain ancient sees in lands overrun by the Mohammedans were designated as *in partibus infidelium*, was suppressed by the Congregation "de Propaganda Fide," and approved by Pope Leo XIII,

February 28th. Where bishops are appointed as coadjutors or auxiliaries, they are made bishops of some one of these ancient sees; and, where necessary to distinguish the fact of non-residence, the formula *titular* bishop is to be used.

**CARDINALS.**—On the 29th of March the Pope pronounced two cardinals reserved *in petto* December 13, 1880, Francis Ricci Paracciani, Majordomo, and Peter Lasagni, Secretary of the Sacred College, both of the order of Cardinal Deacons; and also created cardinals, Dominic Agostini, Patriarch of Venice; Charles M. A. Lavigerie, Archbishop of Algiers; Mgr. Lluch y Garriga, Archbishop of Seville, who died before the close of the year, and Edward McCabe, Archbishop of Dublin. At a second creation, September 26th, Wladimir Czacki and A. Bianchi were also made cardinals; but during the year Cardinals Donnet, Lluch y Garriga, and Sanguigni died.

**DIPLOMATIC RELATIONS.**—Events were now beginning to show that many of the great powers felt that harmonious relations with the Sovereign Pontiff, the spiritual head acknowledged by a large part of their subjects, tended to render them more hearty in their support of the civil institutions under which they lived, and, in times when most radical and disorganizing theories were spreading, the influence of a Church essentially conservative was an element of strength, began to renew their intercourse with the Holy See by regular diplomatic representatives. Baron Von Schlöser, ambassador from Prussia, arrived in February. Russia, France, Brazil, with other American States, followed, and even England prepared at last to enter into diplomatic relations with the Holy See, which legislative enactments no longer forbade. This recognition that the papal sovereignty was diminished only, not destroyed, by the capture of Rome in 1870, only served to bring his anomalous position into a more striking light. A trivial incident brought from Italy a direct denial of the very sovereignty recognized by Catholic, Protestant, and Greek states.

**CASE OF MARTINUCCI.**—Martinucci, an architect employed in the works in the Vatican, dismissed for misconduct in 1879, considering himself aggrieved, brought suit in one of the Italian courts against the Cardinal Secretary of State and the Majordomo. As a claim on the pontifical treasury, it was virtually, though not in form, a suit against the Pope himself, and avowedly for matters arising within the precinct where he was, by the recognition of all, sovereign. To obviate a recurrence of such cases, Leo XIII, on the 25th of May, by a *motu proprio*, declared that "we can not in such questions of internal order permit the intervention of foreign authority," and he established two commissions, each composed of three prelates, to be appointed by him, for the adjudication in the first instance, and on appeal, of all complaints against any administration of the palace

arising on contract or quasi contract. The Italian court, though the question of jurisdiction was at once raised by the advocate Corazzini in the name of the Vatican, overruled it, declaring the Vatican to be within the jurisdiction of the courts established by the Italian Government. It dismissed the case (August 16th) on the merits; but it was carried to a Court of Appeals, which (November 13) affirmed the decision of the lower court, both as to jurisdiction and as to the merits of the case.

The whole question was discussed, and Menchetti, in his "*Stato Chiesa*," avowed that the law of guarantees was "only a temporary affair, intended to quiet Catholic powers and populations, the real object being to put an end in time to the exceptional and privileged situation it created for the papacy, and to make the Sovereign Pontiff return to the common law." Other leaders held the same views, Borighi, in the "*Nuova Antologia*," saying distinctly: "The rights of the Pope are inviolable only because the Italian law makes them so." The Cardinal Secretary of State addressed a note to the nuncios at the European courts, and the position of the Pope was brought up directly for diplomatic action. In the excitement against Austria, arising out of the Overdank affair, an attack was made, on December 29th, in the Piazza Sciarra, at Rome, on the carriage of Count Paar, the Austrian ambassador to the Pope. The Italian court before which the offender was brought ignored the diplomatic character of Count Paar, and held the offender "for an offense against an office of the administrative order."

In his allocution of December 24th the Pope said: "This year the work of persecution has not stopped. We will not speak of the increasing audacity of a shameless press, nor of the unworthy insults it launches with impunity for this end against all that is respected and sacred. We form no new complaints on the many Italian dioceses long left without pastors, although seasonably provided by us, nor on the spiritual loss which the faithful population receive. But we must mention a new attempt made on our inviolable rights. They have pretended to maintain that the very site of our abode is no longer to be respected or inviolable; whence it results that in the very precincts of our apostolic palace we are no longer free to exercise our sovereign rights."

In fact, the Italian law did not recognize in the Pope the immunity which the Pope's nuncio enjoyed at every European capital.

**GERMANY AND THE POPE.**—The state of the Catholic Church in Prussia and the German Empire was not improved in 1882, although the Government allowed some vacant sees to be filled. Several dioceses were still without bishops, and hundreds of parishes without priests. The Government had made some effort to obtain of the Pope a surrender of rights without repealing the May laws. In 1878, during the illness of the Emperor, the



Imperial Prince addressed Pope Leo XIII. The same year Prince Bismarck met at Kissingen Mgr. Masella, nuncio at Munich, but would not consent to a revision of the May laws. The next year he had interviews with Cardinal Jacobini at Vienna and Gastein, and Mr. Huebler was sent to Vienna to prepare for negotiations. Early in 1880 the Pope, in a letter to the Archbishop of Cologne, showed a willingness, for the sake of delivering the Catholics from their spiritual destitution, to do anything not absolutely incompatible with the discipline of the Church. Finally, in 1882, Mr. Schlözer was sent to Rome as Prussian ambassador, and negotiations were begun, but little progress was made. Leo XIII at last, in order, if possible, to bring the matter to a definite settlement, addressed the Emperor in person:

I.

YOUR MAJESTY: At the last opening of the Prussian Landtag your Imperial and Royal Majesty expressed to your people your heartfelt joy at the re-establishment of friendly relations with the head of the Catholic Church. Your utterances were so kind toward us that they were exceedingly agreeable, and we are forced to tender your Majesty our especial thanks. We do so with heartfelt satisfaction.

Since the beginning of our pontificate our confidence in the noble and generous nature of your Majesty has been so great, that we felt sure of the return of religious peace and tranquillity of conscience to the people under your powerful scepter; and now the re-establishment of diplomatic relations, and the interest which your Majesty evinces, strengthen our hopes.

Your Majesty's long experience and high good sense teach you the necessity of the observance of religious duties by the people for the fulfillment of those which fall on them as citizens and subjects. This is especially the case at present, when society is shaken to its very basis. We can assure your Majesty that the Catholic Church is animated by a similar spirit, and, unless obstructed, she has the will and the power to extend it everywhere. It is our earnest desire to have the holy influence of the Church used for the advantage of both the people and the Government, and for such a purpose to seal relations of friendship and peace.

If the imperious duties of the apostolic ministry, filled with responsibility to both God and man, force us to ask that the new ecclesiastical legislation of Prussia—at least in the points essential for the existence and life of the Catholic religion—may be definitively softened and improved, your Majesty, far from ascribing it to a lack of conciliatory disposition, will please acknowledge that we ask it in the interest of peace, which could not be true and lasting were it not established on a solid foundation. This pacification, while it will satisfy one of the most ardent desires of our heart, and bind with stronger ties to the throne of your Majesty the souls of all your Catholic subjects, will no doubt form the most beautiful and precious crown of your long and glorious domination.

With this hope we raise to Heaven the most fervid supplications for the prosperity of your Majesty, and of your imperial and royal family.

LEO, P. P. XIII.

From the Vatican, December 8, 1882.

To the Imperial and Royal Majesty of William I, Emperor of Germany and King of Prussia.

This elicited the following reply:

BERLIN, December 22, 1882.

I thank your Holiness for the letter which you addressed me on the 8d of this month, and I reciprocate with all my heart the kindly feelings it manifests. This letter confirms me in the hope that your Holiness

will derive, from the satisfaction you share with me at the restoration and activity of my legation, a new motive for replying, by an equal advance, that of my Government, which has rendered the occupation of most of the episcopal sees possible.

I am of opinion that such an advance, if made in the matter of the designation of ecclesiastical nominations, would be more advantageous to the Church than to the State, because it would open the possibility of filling the ecclesiastical posts which have become vacant. If, in consequence of an advance of the clergy in this matter, I could feel assured that the desire for an understanding is reciprocal, I might lend my hand to the submission for a fresh examination by the Landtag of my monarchy of those laws which were useful in the period of the struggle for the defense of the contested rights of the State, without their being necessary in a permanent manner for pacific relations.

It is with satisfaction that I avail myself of this occasion to assure your Holiness once more of my devotedness and personal veneration.

(Signed)

WILLIAM.

Countersigned BISMARCK.

II

YOUR MAJESTY. The letter which your Imperial and Royal Majesty sent us last December by the hands of Signor Schlözer, Envoy Extraordinary and Minister Plenipotentiary from Prussia to the Holy See, has confirmed in us the hope, long time entertained, of a complete settlement of the religious controversies in the kingdom of Prussia. The readiness of your Majesty to co-operate in a revision of ecclesiastical legislation, indicates the conclusion of a complete agreement at no distant date. For this favorable disposition of your Majesty we express our thanks and satisfaction.

We have directed our Cardinal Secretary of State to write a note to Signor Schlözer, which note we believe has already been brought to the knowledge of your Majesty's Government. In that note we desired that the royal Government should be assured of our will, manifested on many other occasions, to permit the bishops to notify the Government of the candidates selected for the pastoral benefices. And, in order to get nearer to the views and wishes of your Majesty, we have also made known our disposition, after the requisite notification, to fill up the parishes actually vacant, without awaiting the complete revision of the existing laws.

We have, however, asked meantime that the measures now binding the exercise of the ecclesiastical power and ministry in the instruction and education of the clergy be modified, because a modification, we believe, is indispensable to the very life of the Catholic Church.

She desires that her bishops shall have the power to train and instruct her sacred ministers vigilantly, and according to the spirit of the Church. The State could not exact less than this for its own functionalities. A reasonable freedom in the exercise of ecclesiastical power, and in the ministry, for the welfare of souls, is also an essential element of life in the Church. It would be useless to nominate to parishes new candidates, if they were forbidden to act in conformity with the duties imposed upon them by the pastoral office.

Once in accord on these points, it will be easy, with a reciprocal good will, to come to an understanding on other conditions necessary to insure a true and lasting peace, the final aim of mutual wishes.

Meantime we pray your Majesty to accept the repeated expression of the fervent supplications that we do not cease to raise for the full prosperity of your Majesty, and of the imperial and royal family.

LEO, P. P. XIII.

From the Vatican, January 30, 1883.

To his Majesty Imperial and Royal William I, Emperor of Germany and King of Prussia.

**RUSSIA AND THE CHURCH.**—While the negotiations between Prussia and the Holy See were thus protracted, from the unwillingness of Prussia to recede from the extremely harsh legislation adopted against the Catholic Church, the relations between Russia and the Pope had been speedily adjusted. The persecution of Catholics in Russia had lasted for twenty years; hundreds of bishops and priests had been exiled to Siberia or other districts; men had been forced into their places who went over speedily to the State Church; whole districts were compelled to accept that Church and its ministry. The Russian Government, relaxing its severity, set at liberty Bishop Borowsky, who had been for twelve years interned at Perm, and released others soon after. The Russian ambassador, M. de Bouteniew, on December 24th, signed a convention with the Cardinal Secretary of State by which the Latin Catholics, and especially the United Greeks—that is, Catholics following the Greek rite, but united to the Holy See—secured a degree of liberty and peace that they had not enjoyed for years.

**FRANCE AND THE CHURCH.**—In France the Government continued its system of hostility. By a law of March 18th, a set of books on civic morality, compiled by Paul Bert and other writers in a spirit hostile to Christianity, were introduced into schools. The books were condemned at Rome, and several bishops, in pastoral letters, announced to parents that they could not conscientiously permit their children to learn them. For this the bishops were cited before the courts. Steps were then taken to suppress all religious instruction in schools, and all Christian emblems were removed. Abbot Couturier and his Benedictine monks were forcibly evicted from their monastery at Solesmes by a force of soldiers and *gens d'armes*. As a compensation for the church property seized by the Government, it had been established that a yearly stipend was to be paid to each priest doing parochial duty, and that, in each commune where the collections did not meet the expenses of maintaining the Church, the deficiency was paid by the commune. In 1882 a law exempted the commune from this obligation.

**PORTUGAL, ETC.**—Portugal and Belgium were in a somewhat similar position with regard to the Pope, and, at a later period, Chili also. The nomination to the bishoprics is in these countries claimed by the State, and in each of them nominations were made which at Rome were not deemed such as could in conscience be approved by the Pope. Threats were made of suppressing episcopal sees in Belgium and Portugal.

**UNITED STATES.**—In the United States provincial councils were held at Cincinnati (March 4th) and San Francisco (April 29th), and a synod at New York (November 8th). A new see was erected at Grand Rapids, Mich. Bishop Lynch, of Charleston, one of the most learned and able members of the hierarchy, died February

26th. Several cases affecting the discipline or property of the Catholic Church were before the courts. In *Sheehan vs. Twigg*, the Supreme Court of Pennsylvania, following decisions in Michigan and elsewhere, held a bishop not personally liable to a priest for his salary. In Ohio, a case against Archbishop Purcell was tried early in the year, but no decision was rendered in 1882. The Vicar-General of the diocese, Very Rev. E. Purcell, had for years received deposits of money, which he invested or loaned so injudiciously that he failed, owing some millions, and had no books to show how the money had been employed. The Most Rev. John B. Purcell, as Archbishop, assumed the responsibility of his brother's acts, and on this the creditors claimed all ecclesiastical property held in the Archbishop's name. The main questions at issue were, whether a trustee can, by assuming the acts of another, deprive his *cestui que trust* of their property which he holds merely as trustee; and, further, whether any particular church was liable to the creditors beyond the amount it may have received as a loan or grant from the insolvent. Actual count showed two fifths of the church-goers in Boston and seventeen twenty-fourths of those in St. Louis to be Catholics.

The foreign missions showed exertion, peril, and death. In China, the missionaries in northern Honan were often in danger of death, and were compelled to fly from one place to another to escape the mandarins. A missionary was killed at Peishun, but in southern Honan and in Tchely the missionary reported more than sixteen hundred adult converts. Progress was also made in Tonquin. In Zanzibar the Sultan showed such favor to the missionaries that the Pope sent him an elegant mosaic work.

The general life of the Church was shown in pilgrimages to Rome, and in the centenaries of St. Francis of Assisium and St. Teresa. Among the pilgrimages, one from Spain began to assume a political aspect, but the Pope, declining to receive one except as organized by the bishops severally, prevented any political demonstration. An encyclical letter, addressed to the archbishops, bishops, and other ordinaries of Spain (December 8th), sought to restore harmony. The centenaries of St. Francis (September 8th) and St. Teresa (October 15th) were especially encouraged by the Pope, who, in a brief, warmly commended the extension of the Third Order of St. Francis as a remedy for our times. Both celebrations were made a means of reviving piety.

The Propaganda, by a circular of October 20th, invited Catholic missionaries in all parts of the world to send contributions to the great ethnological collection, the Borgia Museum, in the Vatican.

**ROUMANIA**, a kingdom of Eastern Europe, formerly a province of Turkey. Absolute independence was proclaimed May 22, 1877, and was recognized by the powers at the Congress of Berlin, June 13, 1878. The Principality of



Roumania was erected into a kingdom March 26, 1881. The Constitution was elaborated by a Constituent Assembly in 1866. It delegates the legislative power to the Senate, of seventy members, and the Chamber of Deputies, of one hundred and forty-five members. The members of both Houses are chosen by electoral colleges for each district. Every citizen able to read and write is a voter. The King has a suspensive veto on legislation.

The King, Carol I, is the son of Prince Hohenzollern-Sigmaringen, born April 20, 1839. He was elected Prince of Roumania in 1866, after the abdication of Alexander John, who was elected Hospodar upon the union of Moldavia and Wallachia into the Principality of Roumania in 1861.

The executive authority is exercised by a council of seven ministers. The Cabinet, as reconstructed in August, 1882, is composed of the following members: President of the Council and Minister of War, Ivan Bratiano; Minister of Foreign Affairs, Demetrius Sturdza; Minister of the Interior, G. Chitzu; Minister of Finance, G. Lecca; Minister of Agriculture, Commerce, and Public Works, Colonel N. Dabija; Minister of Public Instruction and Religion, Aurelian.

**AREA AND POPULATION.**—The area of Roumania, as fixed by the Treaty of Berlin, is about 49,979 square miles. By that treaty the Bessarabian provinces annexed by the Treaty of Paris to Roumania, embracing 3,270 square miles, and containing about 140,000 inhabitants, were restored to Russia; and a territory including the islands of the delta of the Danube, the Sandjak of Tulteha, and a strip south of the Dobrudja, 5,935 square miles in total extent, and containing about 357,000 inhabitants, were annexed to Roumania. The population of the kingdom is known only by estimates. The official estimate of the total population in 1882 was 5,376,000. In Roumania, as it was before the Treaty of Berlin, the estimated population of 5,073,000 souls included 772,700 strangers, to wit: 400,000 Israelites, 200,000 Bohemians, 85,000 Slavs, 39,000 Germans, 29,500 Hungarians, 8,000 Armenians, 5,000 Greeks,

2,000 French, 1,000 English, 500 Italians, and 2,700 Turks, Poles, Tartars, and others. The 106,943 inhabitants of the Dobrudja comprise 31,177 Roumanians, 16,493 Turks, 28,715 Bulgarians, and 30,558 of other nationalities.

The Greek Orthodox is the state religion. The numbers of adherents to this faith are estimated at 4,529,000; of Roman Catholics, 114,200; of Protestants, 13,800; of Armenians, 8,000; of Lipovans, 6,000; of Israelites, 400,000; of Mohammedans, 2,000. This estimate does not include the population of the annexed sandjaks, which increased considerably the numbers of Mussulmans and Lipovans.

The principal cities are Bucharest, the capital, containing, in 1879, 221,000 inhabitants; Jassy, containing 90,000; Galatz, 80,000; Botochani, 89,941; Ploesti, 33,000; Braila, 28,272; Berlad, 26,568; Craiova, 22,764; Giurgevo, 20,866; Focsani, 20,866; and Piatra, 20,000.

**FINANCES.**—The revenues of Roumania are derived principally from a poll-tax of nine lei and other direct taxes, from the tobacco monopoly, and from the profits on the state property. Following is a summary of the budget for the year ending March 31, 1883, in lei (the lei is equivalent to a franc, the French system of money, weights, and measures having been established in 1876):

RECEIPTS.		Lei.
Direct taxes .....	25,190,000	
Indirect taxes .....	51,886,000	
Public property .....	18,481,600	
Of the ministries .....	17,282,522	
Various receipts .....	7,817,922	
Tithe for collection of direct taxes .....	2,519,000	
<b>Total .....</b>	<b>122,627,044</b>	
EXPENDITURES.		Lei.
Public debt .....	45,458,481	
Council of Ministers .....	63,560	
Ministry of Finance .....	18,755,997	
“ Foreign Affairs .....	1,550,001	
“ Justice .....	4,276,496	
“ Education and Worship .....	11,881,890	
“ War .....	26,404,838	
“ Public Works .....	8,705,212	
“ the Interior .....	9,705,959	
Contingent fund .....	1,874,660	
<b>Total .....</b>	<b>122,627,044</b>	

The public debt stood on April 1, 1882, as follows, the amounts in lei or francs:

LOANS.	Original issue.	Outstanding.	Year of extinction.
Stern Brothers, 1864, 7 per cent. ....	22,889,437	8,767,500	1888
Oppenheim, 1866, 8 per cent. ....	31,610,500	17,515,500	1889
Rentes, 1875, 5 per cent. ....	44,600,000	40,869,500	....
Converted local, 1880, 6 per cent. ....	31,600,000	31,865,200	1924
Funded, 1881, 5 per cent. ....	148,200,000	147,750,000	1931
<b>Total, general. ....</b>	<b>278,899,937</b>	<b>245,767,200</b>	<b>....</b>
Suceava-Roman Railroad, 1868, 7½ per cent. ....	51,535,640	51,442,159	1968
Fund of deposits, 8½ per cent. ....	9,985,320	9,744,962	....
Jassy-Unglien Railway, 1872, 8 per cent. ....	8,770,215	1,683,635	1886
Roman-Verciorova Railroad, 1880, 6 per cent Treasury bonds .....	237,500,000	236,605,000	1923
Treasury bonds, 1881, 5 per cent. ....	47,948,000	47,948,000	1899
<b>Total, special .....</b>	<b>350,739,175</b>	<b>347,423,806</b>	<b>....</b>
<b>Total debt .....</b>	<b>629,639,112</b>	<b>593,191,006</b>	<b>....</b>

**ARMY.**—The military law of June 11, 1868, was modified in 1872, 1874, and 1880, and

again by the law of June 8, 1882. The military forces are divided into (1) the active army,

composed of the regular army and its reserve, and the territorial army with its reserve; (2) the militia; and (3) the civic guard in the towns and the *gloate* or levy in mass in the rural districts. Every able-bodied Roumanian must be enrolled in the regular army—three years in the active army and five in the reserve, or in the territorial army, in which the term is likewise eight years; five in the infantry, and four in the cavalry, active. Lots are drawn to determine to which army a young man is to belong. Those legally exempt and those who have served their time are enrolled in the militia up to their thirty-seventh, and in the third class up to their forty-seventh year. The peace effective of the regular army is 1,200 officers, 18,532 men, 2,945 horses, and 180 guns; the strength of the territorial army is about 100,000 men and 90 guns. Roumania has a naval force of 4 steamers and 14 small gunboats.

There were 780 miles of state railroads in operation on July 1, 1882, and one belonging to a company, 140 miles in length. The total cost of construction was 376,450,000 francs; the gross receipts in 1881, 22,800,745 francs; the running expenses, 16,854,441 francs. There were 420 miles of new lines in construction.

The postal traffic in 1881 embraced 6,873,317 private letters and a total of 12,504,199 letters, circulars, etc., besides 415,469 packages and 881,110 postal orders.

The length of the state telegraph lines in 1881 was 3,320 miles; length of wires, 5,420 miles. The number of private domestic dispatches was 648,234; of private foreign dispatches, 292,797; total number of dispatches, 1,150,188. The total receipts were 4,028,727 francs.

COMMERCE.—The imports of Roumania increased from 82,927,228 lei in 1871, to 274,757,458 in 1881; the exports from 177,682,783 to 206,518,317 lei. The exports consist entirely of cereals and other agricultural products. The values exported of the chief classes of articles in 1881 were as follow, in round numbers: Cereals, 157,200,000 lei; animals, 16,600,000; textile materials, 7,100,000; wood, 5,200,000. The following were the chief classes of imports: Textiles, 98,400,000 lei; metals and metal manufactures, 48,600,000; leather, 36,500,000; wood and its manufactures, 13,900,000. Of the total imports 135,000,000 lei came from Austria-Hungary, 50,500,000 from Great Britain, 31,800,000 from Germany, 22,700,000 from France, and 16,400,000 from Turkey and Bulgaria; of the exports, 82,200,000 lei went to Great Britain, 72,100,000 to Austria-Hungary, 19,300,000 to France, 11,400,000 to Turkey and Bulgaria, and 1,600,000 to Germany.

DANUBIAN COMMISSION.—The European Commission of the Danube was created by the Treaty of Paris in 1856, and continued and endowed with larger powers by the Treaty of Berlin in 1878. It has its seat at Galatz, and has delegated to it, as the representative of the

seven contracting powers and of Roumania, certain sovereign rights over the Danube below Galatz, viz., to exercise police jurisdiction, to frame and promulgate regulations which have the force of law, to levy imposts, raise loans, and apply the proceeds to works of public utility. According to the convention signed at London, March 31, 1871, the existing commission continues its functions twelve years from that date. The works finished and to be finished by the commission were declared perpetually neutral.

The accounts of the commission for 1881 show 3,448,190 francs of receipts, of which, 1,985,052 came from fees and tolls, and 1,463,138 from other sources. The expenses were 2,606,095 francs, of which 1,111,685 were for the service of the debt; 289,458, administrative expenses; 711,098, technical service; and 493,854, various charges. The debts of the commission consisted on January 1st of the unpaid portion of an advance made by the Sublime Porte, and transferred to Erlanger & Co., amounting to 2,469,371 francs, to be repaid by 1883, and of a loan contracted in 1868, amounting to 312,540 francs, due in 1882. The commission possessed as assets a reserve fund of 1,000,000 francs, and the year's surplus of 842,095 francs, besides a pension fund of 264,856, and a pilotage fund of 46,564 francs.

The commerce of the Danube is almost exclusively in grain. Most of the vessels arrive in ballast. The participation of the different nations in the navigation of the river is shown in the following table, giving the number and tonnage of vessels cleared in 1881:

FLAG.	Steamers.		Sailing-vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
English .....	516	496,666	7	2,328	523	498,994
Greek .....	50	44,173	487	84,518	537	128,691
Austrian .....	83	42,699	18	4,806	101	47,005
French .....	58	45,660	39	5,187	97	45,669
Russian .....	44	5,580	..	..	44	10,717
Turkish .....	..	..	845	88,894	845	88,894
Italian .....	3	2,862	24	6,688	27	9,550
Roumanian .....	..	..	15	2,967	15	2,967
German .....	3	2,168	..	..	3	2,168
Others .....	18	13,249	6	610	24	13,859
Total .....	770	653,016	941	140,438	1,711	793,454

The number of vessels which sailed from Danubian ports in 1880 was 1,813, of 658,063 tons aggregate burden, embracing 583 steamers, of 467,189 tons, and 1,230 sailing-vessels, of 190,874 tons. The exportation of grain from the ports of the lower Danube was 5,403,421 quarters in 1881, against 4,251,331 quarters in 1880, and 5,394,729 in 1879.

FOREIGN RELATIONS.—The Danubian question engrossed the attention of the Roumanian people more than the important subjects of internal reform which were broached in 1882. The Government in apologizing upon the demand of Austria, and under the pressure of Germany and Russia, for the bold declaration in the royal address of 1881 (see "Annual Cyclopædia" for 1881), did not abandon the



principle therein asserted. The French member of the Danube Commission, Barrère, offered a substitute for the Austrian proposal for a commission to regulate the navigation of the Danube between the Iron Gates and Galatz, under the presidency of Austria. Barrère's project was, that instead of Austria retaining the presidency and casting vote in the new commission, the delegates of each of the powers participating in the Danubian Commission should exercise them in turn, alternating annually in alphabetical order, according to the French nomenclature. This proposition was opposed by Roumania, for the same reason that the original *avant projet* was opposed, since for the first two years Germany and Austria would have the presidency of the new commission. A counter-project was proposed by Roumania, according to which a supervising commission should be created, to be composed of two delegates appointed by the Danubian Commission, and one each from the riparian states, Bulgaria, Roumania, and Servia; the delegates of the Danube Commission to be changed half-yearly, and to be taken from the states-participating in the commission in alphabetical order.

Another Danubian question arose in the latter part of the year, in which the Roumanian Government had to defend itself against the pretensions of Russia, as it had against those of Austria-Hungary, in the question of a mixed commission, to control the navigation between the Iron Gate and Galatz. When the Danubian Commission were preparing to have soundings made in the Kilia outlet, the Russian Government proposed to send engineers to participate in the surveys, on the ground that, as a riparian power, Russia was interested in plans for rendering navigable the Kilia branch. This branch of the Danube is the boundary between the Bessarabian provinces, ceded back to Russia by the Berlin Treaty, and the territory acquired by Roumania from Turkey. The Russian authorities ordered soundings to be taken independently of the operations of the commission, but the season was too far advanced for anything to be done before spring. The Roumanian Government protested at once against having the Kilia branch placed in an exceptional position, basing its protest upon the existing treaties which give the Danubian Commission jurisdiction over all three mouths of the river. The matter at issue is of technical as well as of political importance. The Kilia branch is as large as the Sulina branch, both being smaller than St. George's Channel. Operations which would make the Kilia branch navigable might interfere with the navigation of the Sulina branch, which was chosen as the international route of communication by the commission, and upon which they have expended their funds.

Both the Kilia question and the difficulty with Austria were postponed till the meeting of plenipotentiaries at London, in 1883, at

which the question of renewing the powers of the Danubian Commission was to be decided, and all matters relating to the Danube reviewed and resettled.

**POLITICS AND LEGISLATION.**—In the beginning of the year the Bratiano-Rosetti Cabinet was broken up. The opposition of the landlords, who form the majority of the Senate, to Rosetti's projects of agrarian reform, led to the dissolution of the Liberal combination, as much as the external cause of the recantation of the brave words in the royal address respecting the sovereignty of Roumania over the Danube within her borders. The Minister-President succeeded Rosetti in the Interior Department, being relieved of the portfolio of Military Affairs, of which he had charge *ad interim*, by General Angheliesco, while G. Lecca took charge of the Department of Finance. Chitzu became Minister of Justice, the other ministers remaining in their places.

Rosetti's reform was intended to place the peasantry on a similar footing with the laborers of other countries in regard to their labor-contracts with the land-owners. When serfage was abolished in 1864, the lands apportioned to the emancipated serfs formed only a small portion of the tillable soil, and were far from sufficient to support them. The peasantry were not particularly well disposed to their former lords. Measures were adopted for the purpose of compelling them to work on the land, which gave the landlords almost the same powers over laborers who entered into contracts with them as those which they had exercised over these laborers as serfs. Rosetti resigned his seat in the Cabinet, in order to press his agrarian reform more effectively. The measure passed the Chamber of Deputies in the form in which it was brought in by the Government. In the Senate it was considerably altered by amendments, which secured it the support of the land-owners belonging to the Government party, and which were accepted by the Chamber.

According to the old law, the contracts, into which the peasants were obliged by their necessities to enter, could extend over several years, and could be enforced by stripes as well as by fines. The new law abolishes whipping and money-fines, and reduces the number of days which the peasant can be compelled to labor. It also limits the duration of such labor-contracts to two years.

Rosetti introduced a supplementary bill, which also became law, by which the state assumed the debts of the peasants which they had engaged to discharge by future labor, and is to be repaid by the peasants in annual payments extending over a series of years.

The Jewish question in Roumania was a sore one before it became acute in other parts of Eastern Europe. The heedlessness of the landed gentry in money matters, and their repugnance to affairs, made them peculiarly dependent upon the Jews, who monopolized the mercantile

and financial business of the country. The right of citizenship and of owning real estate was denied them. Without these mediæval restrictions the land-owners could not have preserved their estates. In the recent advances of Roumania toward equal rights and constitutional liberty the civil disabilities of the Jews have been removed, but only in form. In the revision of the Constitution in 1879 all confessions were placed on an equal legal footing. Every application for naturalization must be passed upon by the Legislature. No Hebrew has any prospect of receiving the rights of citizenship, however long his family may have been settled in Roumania. Not only have the old restrictions been thus retained, but attempts are made, since the participation of Roumanians in mercantile and other middle-class occupations, to exclude the Jews from the callings which have hitherto been followed by them exclusively. Legislation for this purpose is directed ostensibly against all foreigners, in order to satisfy the provisions of the Constitution. In the last two years, by a series of laws and Cabinet orders, foreigners have been shut out from all licensed and semi-official occupations. According to the license law of 1874 foreigners were denied the privilege of keeping public-houses in the villages. A ministerial order recently extended this regulation to the smaller towns. In like manner foreigners have been excluded from the tobacco-traffic. The professions of the law and teaching have been also closed to them. More recently a law was enacted, according to which no foreigner can be licensed as a broker on the bourse. In the custom-house regulations, voted by the Legislature in the session of 1882, the right of official intercourse with the custom-house was restricted to Roumanian citizens. This rule affected not only the Jewish custom-house brokers, but all importers, actual foreigners as well as Jewish merchants. The Austrian Government protested against it, as contrary to treaties. It was not enforced by the Roumanian authorities on this account. The new restrictions against the Jews, which threatened to deprive many of them of their livelihood, caused the Jewish community to think of emigrating from this inhospitable country. A large number of Roumanian Israelites embraced Oliphant's scheme of recolonizing Palestine, until the emigration to the cradle of the race was stopped by the action of the Turkish Government.

The Chambers passed a measure providing for the definitive acquisition of the entire railroad network by repaying and dissolving the Roumanian Railroad Company. They also voted for building several new railroads and laying out others.

A new military law was enacted, by which the effective strength of the army was increased.

In August occurred another ministerial crisis and a reconstruction of the Cabinet, again in a

conservative direction. Demeter Sturdza entered the Cabinet as Minister for Foreign Affairs, Bratiano taking the portfolio of Military Affairs, and Chitzu that of the Interior, while Angheliesco and Urechia, the Minister of Education, retired, the latter giving up his place to Aurelian, who, like Sturdza, belongs to the moderate wing of the National-Liberal party. Statesco took the portfolio of Justice.

C. A. Rosetti, the intellectual leader of the National Liberals, after retiring from the ministry and carrying his agrarian reform bill as an independent member, took up the question of electoral reform, which he pressed vigorously in his organ, the "Romanul." Before the close of the spring session he resigned his seat in the Chamber, as a protest against the opposition which his reforms met, not only from the Conservatives, but from the aristocratic element in the National-Liberal party. This party, recently so preponderant, showed signs of disruption. Its weakness is not due merely to the divergence of opinion on the reforms advocated by Rosetti, in which social questions the politically strong aristocratic element are inclined to stand by their order, but also to the repugnance of this same element to the class of professional politicians which has sprung up in the party, and the corruption, more or less shielded and glozed over by the leaders.

RUSSIA, an empire in Eastern Europe. The law-making, executive, and judicial authority is concentrated in the person of the Czar, who is also the spiritual head of the Church. His absolute will is unlimited, except by the law of succession, embodied in a decree of Peter I, requiring the Emperor and his family to be members of the Greek Orthodox Church, and one of Paul, issued in 1797, introducing hereditary descent in the order of primogeniture, with female succession only in default of male heirs. The latter rule annulled the decree of Peter I, issued in 1722, ordaining that the Czar should select his successor from among the royal family.

The government of the country is under the supreme direction of the Emperor's private Cabinet. Subordinated to the Imperial Cabinet is the Council of the Emperor, divided into a legislative, an administrative, and a financial department, the functions of which are to superintend the administration of the laws, and to suggest alterations and amendments. A second great council is the directing Senate, which is the highest court of judicature, besides exercising a control over the other tribunals of the empire. It is divided into eight sections, each of which acts as the court of final resort in a particular branch of the law. A third great governing body is the Holy Synod, which has the direction of ecclesiastical affairs. All its decisions must be ratified by the Czar.

The Imperial Cabinet is divided into eleven departments. The Minister of the Imperial Household is General Count Worontzov Dash-



kov, who succeeded Count Alexander Adlerberg in 1871. At the beginning of 1882, Prince Alexander Michael Gortchakoff was still Minister of Foreign Affairs, over which department he had presided since 1856, though N. De Giers has had the practical management for some years. When the long-deferred retirement of Prince Gortchakoff took place in March, he was succeeded by De Giers. The Minister of War is General Count Vannoski, who was appointed March 29, 1881. General Count Ignatieff, who was appointed Minister of the Interior, March 29, 1881, was succeeded by Count Tolstoy in June.

The post of Minister of Public Instruction vacated by the latter was filled by Baron Nicolai. The Minister of Finance, Bunge, took the place of Count Abaza, during the ministry of Ignatieff. The Minister of the Navy is Rear-Admiral Ochestakov, who succeeded Rear-Admiral Petshurov. The Minister of Domains is M. Ostrovski, the successor to P. A. Valouiev. The Minister of Public Works, or Highways and Communications, is Rear-Admiral C. Possiet, appointed July 23, 1874. The Comptroller-General, Solski, was appointed in October, 1879. The President of the Council of Ministers is Reutern. All the ministers and heads of administrative departments are members of the Council.

**AREA AND POPULATION.**—The Russian Empire covers one seventh of the land-surface of the globe. The total area is about 8,379,500 square miles. The area of the geographical divisions of European Russia and their population in 1870, the approximate area of the Asiatic possessions, and their population as ascertained at various dates between 1873 and 1880, are shown in the following table. (See EUROPE, AREA OF.)

GEOGRAPHICAL DIVISIONS.	Square miles.	Population.
Great Russia.....	880,798	24,005,459
Little Russia.....	80,226	7,695,861
Eastern Russia.....	546,470	15,143,716
South Russia.....	165,851	5,819,302
Western Russia.....	161,897	9,822,259
Baltic Provinces.....	57,269	3,269,462
Total Russia Proper.....	1,895,041	65,695,559
Poland.....	49,157	6,026,421
Finland.....	144,221	1,857,035
Cis-Caucasia.....	87,069	1,949,278
Total Russia in Europe..	2,175,488	75,428,298
Trans-Caucasia.....	85,756	3,521,203
Armenia.....	9,920	176,073
Trans-Caspian Territory.....	126,830	203,000
Central Asia.....	1,165,500	5,036,000
Siberia.....	4,824,500	3,911,200
Total Russia in Asia.....	6,212,276	12,847,476
Total empire.....	8,387,764	88,275,769

The following are the cities containing over 50,000 inhabitants in European Russia:

CITIES.	Population.	CITIES.	Population.
St. Petersburg.....	576,575	Riga.....	169,683
Moscow.....	611,974	Kherson.....	123,079
Warsaw.....	389,341	Kiev.....	127,251
Odessa.....	198,518	Kichinev.....	112,137

CITIES.	Population.	CITIES.	Population.
Kharkov.....	101,175	Lodz.....	57,000
Kasan.....	94,170	Orel.....	53,505
Vilna.....	88,698	Simferopol.....	52,585
Saratov.....	86,418	Berdicheff.....	52,568
Nikolaiev.....	82,805	Dunaburg.....	52,261
Elizabethgrad.....	63,064	Samara.....	51,947
Astrakhan.....	57,704	Revel.....	50,859
Tula.....	57,374		

Cronstadt, Taganrog, Orenburg, Voroneje, Rostov on the Don, Helsingfors, capital of Finland, Minsk, Nijni-Novgorod, Kovno, Jitomir, Mohilev, and Vitebsk contain between 40,000 and 50,000 inhabitants. In Russia in Asia the largest cities are: Tiflis, population 104,024; Tashkend, containing about 100,000; Andijan, 43,000; Samarcand, 36,000; Khokand, 35,000; Stavropol, 34,328; Irkutsk, 33,800; and Tomsk, 33,795.

The number of emigrants from Russia from 1871 to 1880 amounted to 2,807,000, against a counter-immigration of 2,455,000; a loss to the empire of 352,000 souls, or about 35,000 yearly. Only those who received regular passes are counted among the emigrants. The immigrants are nearly all Germans.

**COMMERCE.**—The total value of the merchandise imports of 1880 was 622,812,000 rubles, against 587,713,000 in 1879; of the exports, 498,672,000, against 627,768,000 rubles. The commerce with Europe and America amounted to 578,334,000 rubles of imports, and 476,365,000 of exports in 1880; with Finland, to 11,442,000 rubles of imports and 9,602,000 of exports; with Asia, to 33,036,000 rubles of imports and 12,705,000 of exports. The commerce with the individual countries in 1880 was as follows, in rubles:

COUNTRIES.	Imports.	Exports.
Germany.....	274,268,000	138,132,000
Great Britain.....	150,455,000	145,640,000
France.....	22,410,000	57,690,000
Austria-Hungary.....	23,062,000	32,547,000
Netherlands.....	7,515,000	25,205,000
Turkey.....	20,870,000	15,340,000
Belgium.....	7,423,000	15,899,000
China.....	22,780,000	2,520,000
United States.....	10,204,000	5,234,000
South America.....	15,972,000	10,000
Sweden and Norway.....	2,925,000	12,125,000
Italy.....	6,310,000	5,118,000
Roumania.....	1,736,000	9,956,000
Persia.....	6,860,000	8,940,000
Other countries.....	20,805,000	10,477,000

There were 6,423,000 rubles of imports from the United States reported for 1879 and no exports to that country.

The exports of cereals in 1880 amounted to 226,410,000 rubles, against 363,261,000 rubles in 1879; the imports of colonial produce, 74,649,000 rubles, against 50,462,000; the total imports of articles of consumption, 133,543,000; exports, 302,696,000 rubles. The exports of textile materials were 95,718,000 rubles, imports 66,953,000; the imports of raw metals 66,953,000 rubles, against 56,596,000 in 1879; the total imports of raw materials, 159,302,000 rubles, exports 153,177,000. The imports of yarns were 41,213,000 rubles, against 61,749,000; of textile fabrics, clothing, etc., 34,229,-

000, against 35,520,000; of machinery and other metal manufactures 94,391,000, against 79,972,000 rubles; the total imports of manufactured objects, 177,536,000 rubles, total exports 4,833,000. The total imports of all other classes were 107,953,000 rubles, total exports 15,659,000 rubles. The imports of precious metals amounted to 12,390,000 rubles, against 13,874,000 in 1879; the exports to 28,778,000, against 7,116,000 rubles. The above analysis does not include the trade with Finland, or that with Asiatic countries. The imports of tea in 1880 were valued at 22,355,000 rubles, against 18,648,000 in 1879. Textile materials were imported from Asia of the value of 1,451,000 rubles, and exported to Asia in the amount of 4,193,000. There was an export of 2,916,000 rubles of precious metals to Asia and no imports thence in 1880, as compared with a net export of 2,174,000 rubles in 1879.

The number of ships entering Baltic ports in 1880 was 8,240, of which 5,696 were with cargoes; the number entering the ports of the Black Sea 5,265, with cargoes 2,493; the number entering the ports of the White Sea 882, with cargoes 337; the number entering the ports of the Caspian Sea 971, with cargoes 919; the total number entering Russian ports 15,358, of which 5,948 were steamers. Of the total number, 2,746 sailed under Russian colors, 2,660 under English, 2,573 under German, 2,047 under Swedish, 1,380 under Turkish, 1,088 under Greek, 892 under Danish, 668 under Austrian, and 576 under Dutch. The merchant marine in 1878 numbered 3,643 sailing-vessels, of the aggregate tonnage of 308,230 tons, and 259 steamers, of about 74,324 tons.

**PETROLEUM REGION.**—The petroleum of the Caucasus is expected to come into competition with the American in Europe as soon as the pipe-line from Baku to Batoum, on the Black Sea, is completed. At Batoum the oil will be pumped into tank-steamers. The total area of the Baku petroleum region is about 1,200 square miles, judging from the limits of surface oil and gas wells. The region is almost without water or vegetation. Scattered over the surface of this desert are dried-up salt lakes and exhausted mud-volcanoes, with numerous springs and pools of oil and gas wells. The boring has been principally confined to the peninsula of Apsheron. Nearly every well that is sunk strikes oil. Many have been abandoned, owing to lack of means or the low price of petroleum. Flowing wells yielding from 2,000 to 4,000 barrels a day are common, and pumping wells yielding from 300 to 600 barrels. The total product rose from 500,000 barrels in 1873, to between 3,000,000 and 4,000,000 in 1881, besides enormous quantities which were wasted for lack of tanking and transportation facilities. The export by sea amounted to 2,946,000 barrels in 1881, against 1,702,200 in 1879.

**RAILROADS.**—The extensive network of railroads has aided greatly in developing the commerce of Russia, internal as well as foreign.

From 1838 to 1865 the number of miles constructed was 2,385; in the five years, 1866-'70, 4,343 miles were built, in the next five years 5,071 miles, and in the last about 3,000 miles. The total length in operation on the first of January, 1882, was 14,076 miles, not including nearly 600 miles in Finland. The Czar approved the plans of the Minister of Railroads in 1875 and previously, for enlarging the existing system to the extent of 6,000 miles. The projected lines include the proposed great Siberian railroad and seven railroads through the coal-basin of the Don. Of the 45 railroad companies in existence in 1879, 10 had constructed their lines without Government aid. Of the 35 guaranteed companies, 15 were guaranteed to the full amount of their capital. The charters of the companies are most of them terminable after periods of from 75 to 85 years; but those of some of the smaller railroads run for only 37 years. The gross receipts of the railroads in 1878, with a mileage of 13,611 miles, were 211,905,758 rubles; the working expenses, 133,120,261 rubles. Their aggregate capital was 1,450,288,196 rubles, 49 per cent of which was held by the Government.

**TELEGRAPHS.**—The length of telegraph lines in 1880 was about 59,140 miles; state lines, 54,080 miles; the lines of the railroad companies, 2,235 miles; Anglo-Indian line, 2,270 miles; Aland Island cable, 60 miles; private lines, 250 miles; military and police telegraphs, 240 miles. The aggregate length of wires was about 134,600 miles. The number of dispatches sent was 7,298,429; private inland dispatches, 5,768,255; foreign dispatches received, 500,126; foreign dispatches sent, 496,955; in transit, 77,223; official dispatches, 455,870. The receipts amounted to about \$6,133,000. The expenditures were \$2,828,000 for wages; \$1,682,000 for other working expenses and maintenance; and \$743,000 for the construction of new lines.

**POST-OFFICES.**—The number of post-offices in 1880 was 4,458; of employés, 15,235. The number of letters and postal cards delivered was 128,817,612; circulars, etc., 9,960,727; newspapers, 88,168,700; total, 226,947,039, against 206,502,269 in 1879. The receipts were 14,132,929 rubles, the expenses 15,299,179 rubles.

**AGRICULTURE.**—The number of serfs belonging to nobles and other private persons, emancipated in accordance with the ukase of March 3, 1861, was about 22,000,000, who were the property of 109,340 owners. The number of crown serfs emancipated was 22,225,075 of both sexes. The owners transferred the lands which the peasants cultivate to the village communes, receiving in compensation a commutation of the value of the labor of the serfs at 6 per cent annual interest—that is, a capital sum of 100 rubles for every 6 rubles of annual profit from the labor of the serfs. Of this sum 20 per cent was paid at once by



the communes and 80 per cent was advanced by the Government, to be repaid by the peasants in 49 annual payments. The crown peasants received their lands on the condition of paying for 49 years the annual poll-tax previously paid by them. Of the total cultivable lands of Russia Proper  $\frac{7}{10}$  per cent are in towns,  $34\frac{1}{10}$  per cent belong to the crown,  $8\frac{1}{10}$  per cent are attached to mines,  $15\frac{1}{10}$  per cent are held by crown peasants, 5 per cent by former serfs,  $19\frac{7}{10}$  per cent belong to noblemen and other former proprietors of serfs, and  $20\frac{2}{5}$  per cent is not brought into cultivation. The agricultural distress which followed the emancipation of the serfs in Great Russia is by many attributed to the retention of the old Russian institution of agrarian communism. The German nobility of the Baltic provinces emancipated their own serfs in 1819, and the latter have served their former lords as agricultural laborers, or by the purchase of land become individual proprietors. These provinces are greatly in advance of Great Russia in agriculture and in popular intelligence. The Czar's Government has occupied itself constantly with plans to arrest the agricultural decadence and relieve the distress of the *mujiks*. Much was expected from the abolition of the salt-tax in the earlier period of Loris Melikoff's ministry; but although the Government lost 15,000,000 rubles of revenue, the price of salt remained almost the same as before. Ignatieff approached the subject, with an ostentatious display of national, Panslavistic sentiment, by calling together commissions of "experts," the most important of which was the one on the liquor question. Another outcome of these expert investigations was the reduction of the purchase-money to be paid by the peasants, and the decree that all payments in service should cease at the end of 1888. A third remedy which was adopted is the colonization of communes which are unable to support themselves on their allotments upon vacant crown-lands. The latest remedy for the agrarian distress is the progressive abolition of the poll-tax, announced in a ukase, June 14th. From the 1st of January, 1883, the lower class in the cities and certain classes of peasants are relieved of the poll-tax, while the Finance Minister is to present to the Czar next year a scheme for replacing the whole poll-tax with other revenues.

**ARMY AND NAVY.**—The military force is divided into the active and the territorial armies. The first consists of the standing military and naval forces. The territorial army comprises those who have escaped being drafted into the active army after four annual drawings, those who have served their time in the active army and its reserve, the Cossack irregulars, and bodies composed of foreign elements. There are 19 army corps, of which the Guards and the Grenadiers each constitute one, and the troops of the Caucasus two. There are 852 battalions of infantry, 24 of engineers, 348 squadrons of cavalry, and 337 $\frac{1}{2}$  batteries of ar-

tillery, with 1,406 guns, in the regular army in active service. The war organization of the regular army comprises 1,766 battalions of infantry, 412 squadrons of cavalry, and 484 $\frac{1}{2}$  batteries of artillery, with 3,772 guns. The artillery have been furnished since 1878 with new cannon in cast-steel. By a decree of August 30, 1882, the 14 regiments of lancers and 14 regiments of hussars have been transformed into dragoons.

The effective of the regular army in 1882 is shown in the following table:

REGULAR ARMY.	PEACE FOOTING.		WAR FOOTING.	
	Men.	Horses.	Men.	Horses.
Infantry.....	625,617	11,149	1,915,703	32,296
Cavalry.....	55,560	61,727	94,466	93,440
Artillery.....	108,610	21,252	210,772	118,800
Engineers.....	20,624	661	43,352	14,020
Total.....	840,711	94,789	2,264,293	258,056

The irregular army consists of the Cossacks of the Don, the Kuban, the Terek, Orenburg, the Ural, Siberia, etc., who under the new regulations furnish the regular army with all its light cavalry. The peace establishment counts about 45,000 Cossacks; their war effective is 156,341, formed into 880 *sotnias*, or squadrons. The entire peace establishment of the Russian army is 974,771 men. The army can be increased in war to 2,733,305 men. The active army in 1881 numbered 907,248. The recruit for 1882 was fixed at 212,000 men. The number of years of service in the line was increased by one year, and the class of one-year volunteers introduced. Notwithstanding the need and desire of the Government for economy, the military expenditures are increased. The war-like impulse which stirred Russia in the spring resulted in more energetic endeavors to perfect the military organization, and strengthened the country for offensive or defensive operations on the western borders. A new strategical railroad was built on the Austrian frontier from Prinsk to Jabinsk, and one laid out to run from Vilna to Kovno, joining the first near Prinsk. A sum exceeding 15,000,000 rubles has been set aside to carry out the plans of General Kaufmann for the fortification of the western frontier, a scheme which has been postponed on account of the financial difficulties of the Government. The expenditure is to extend over several years. (See NAVIES OF EUROPE.)

**FINLAND.**—The Grand Duchy of Finland possesses a constitutional government. The population on December 30, 1880, was 2,060,782, comprising 1,756,381 speaking Finnish, 294,876 Swedish, 4,195 Russian, 1,720 German, 961 Lapps, and 14,052 of foreign birth. The budget for 1882 places the total revenue at 36,320,714 marks. (The Finland mark is of the value of a franc. The gold standard was adopted in 1877.) Of the total revenue 10,000,000 marks are derived from customs, 4,540,-

200 from the land-tax, 2,050,000 net from the railroads, 4,225,000 from the tax on the manufacture of liquors, and 5,741,444 from the reserve fund for military purposes. The estimated expenditures are 35,131,146 marks, of which 8,580,064 marks are for military purposes, including the expenses of reorganization, and 4,020,600 for the service of the public debt. The total debt amounted on the 1st of January, 1882, to 61,422,865 marks, the principal part of which was contracted in Germany. The total imports in 1881 amounted to 154,800,000 marks, 68,400,000 from Russia, 40,600,000 from Germany, 17,400,000 from Great Britain, and 11,200,000 from Sweden and Norway; the exports to 107,300,000 marks, of which 49,900,000 went to Russia and 20,700,000 to Great Britain.

**FINANCES.**—The total receipts of the imperial Treasury from ordinary sources in 1880 amounted to something over 651,000,000 rubles. (The silver ruble is the legal unit of account, and is worth 73·4 cents; the circulating medium is paper money, which is exchanged at a discount of from 10 to 20 per cent and over.)

The receipts were 138,000 rubles more, and the expenditures 113,354,000 rubles more, than the budget estimates.

The ordinary receipts for 1882 are estimated in the budget approved by the Emperor January 2d, at 654,217,870 rubles; the miscellaneous receipts known as the "budget d'ordre," and balanced on the expenditure side of the account, at 22,165,068 rubles; the extraordinary receipts, consisting of borrowed money applicable to railroads and other works of utility, at 88,121,574 rubles; the balance in the Treasury at 2,500,000 rubles; total estimated receipts from all sources, 762,004,512 rubles. The estimated total expenditures are as follow: Ordinary expenditures, 658,595,151 rubles; "budget d'ordre," 22,165,068 rubles; extraordinary expenditures, 72,744,293 rubles; excess of receipts, 8,500,000 rubles. The state revenue for the half-year ending June 30th showed an actual increase of 18,985,079 rubles, and the expenditure a decrease of 23,621,226 rubles as compared with the same period of 1881.

The foreign loans of Russia are payable mostly in pounds sterling, the domestic debt in paper currency. The foreign debt on January 1, 1880, reduced to paper rubles, the exchange value of which in London, at that date, was equal to about 50 cents, stood at 672,488,519 rubles, against 720,270,163 rubles on January 1, 1879; the funded domestic debt at 1,367,385,206 rubles, against 1,080,271,995 rubles in 1879; total consolidated debt, 2,039,873,725 rubles, against 1,800,542,158 in 1879.

In Asia the power of the White Czar advances with great strides. The Shah of Persia, recognizing the importance of railroad connections with Russia, allowed the Russians to rectify their boundary so as to include an outlying portion of his own dominions of great natural resources as well as of military impor-

tance (see PERSIA). The mercantile pioneers who flocked to Kuldja to take advantage of the new commercial treaty with China, met with obstacles to their commerce with the interior. General Kolpakovsky, appointed Governor-General of the Steppes and commander of the newly-formed military district of Omsk, has the task of looking after the relations with China. General Tcherniaeff, the conqueror of Khokand, was appointed Governor-General of Turkistan as the successor of General Kaufmann.

**GORTCHAKOFF.**—Prince Gortchakoff handed over the direction of the Foreign Office to M. de Giers, March 22d. He was eighty-four years of age, and his retirement had been many times announced but deferred through his reluctance to resign the position he had so long held. For more than thirty years he has been the director of the foreign policy of Russia, and the most influential statesman of Europe until his aims were thwarted and his power eclipsed by Bismarck. His secretary, who succeeds him, had for five years acted as his substitute and is well known to all the courts of Europe. He was particularly acceptable to Germany, his appointment being considered a pledge of peace after anti-German sentiments had been fanned into a flame by the speeches of the impetuous General Skobelev, foreboding, it was feared, the selection of Ignatieff, who was supposed to have aspired to the position, and a policy of Slavic extension. The rank and title of Chancellor of the Empire were continued to the brilliant diplomatist who had served the state for sixty-five years.

**MINISTER GIERS.**—Nicholas Carlovitch Giers was born May 21, 1820. His family came originally from Sweden. He entered the Asiatic Department of the Ministry for Foreign Affairs at the age of eighteen. His first important service was in Austria during the Hungarian campaign of 1848. He held diplomatic positions in Turkey and Roumania, was sent as a special agent to Bessarabia during the Turkish War of 1855, became Consul-General to Egypt in 1856, and to Wallachia and Moldavia in 1858. From 1863 to 1869 he was ambassador to Persia, where his services helped greatly to cement amicable relations with the Shah. After serving as Minister to Switzerland and to Sweden, he took charge of the Asiatic Department in 1875. In 1876 during a temporary absence of Gortchakoff, in 1877 during the seven months of the Turkish war, and in 1878 during the attendance of Prince Gortchakoff at the Congress of Berlin, he had sole charge of the ministry, which he has retained to all practical intents ever since, as the Chancellor's age and infirmities prevented him from transacting business for any continuous period.

**POLITICS AND LEGISLATION.**—The reforms which were discussed during the last years of Alexander II and the first year of the present reign have been abandoned through the decision, or indecision, of the uncrowned Czar. At the notable Cabinet sitting of March 20,



1881, the project of representative institutions elaborated by Count Loris Melikoff, which would have been signed by the late Czar if the murderous arm of the Nihilist had been stayed for a few days, was approved by a majority of nine against five. Pobodonoszeff and the other defenders of the autocratic principle prevailed upon the Czar to reverse the decision of the Council. Ignatieff, as the representative of pure Russian ideas, was called to the place of the defeated Melikoff. He did not differ, however, from the rest of the leading statesmen upon the question of the necessity of introducing self-government. The Russian people—that is, the eighty millions of serfs lately emancipated—were reduced to the verge of that state of misery which leads to anarchy and revolt. The political disorders of Russia are of long standing, but the conversion of a nation of slaves into freemen has brought graver disorders of a social nature. The country has retrograded economically since emancipation. The emancipation was imperfect, like all such acts. The rural economy and the distribution of land could not be adapted to the new conditions of labor, while the laborers themselves were naturally demoralized by their sudden freedom. Thriftlessness, indolence, and drunkenness are the national vices of the Russians. The peasants received their lands with the obligation of paying for them in a term of years. The peasants have fallen into the power of money-lenders; agriculture has gone backward; idleness and vodka-drinking have increased; live-stock and implements have disappeared; and dishonest merchants have injured the market for the produce of the land and labor by mixing different grades of wheat. At the same time the burden of the Government has increased. The debt, which is the heritage of many wars and generations of extravagance and corruption, has grown to larger proportions. The country is again flooded with a fluctuating, debased paper currency. The Government is unable to borrow more money abroad. All sections of the educated class call for radical changes in the system of government, while socialists proclaim all accumulated wealth to be applicable to the needs of the people. Count Ignatieff appointed many commissions to inquire into the grievances of the people. In combating those which arose from social and economical causes he had the approval of the Czar. The socialist doctrines, apart from their political and revolutionary tendencies, agree with the theory of the czarism. The responsibility of the Czar for the happiness of the people was confirmed in the manifesto of May 10, 1881, written by Pobodonoszeff, in which the Czar asserted the principle of the autocracy, and swept away the constitutional doctrines involved in the proposition of Loris Melikoff. Ignatieff, in view of the financial straits of the Government, the agitation against the bureaucratic system, and the impoverishment and misery of the people, saw

the necessity of calling trusted representatives of the people into counsel, in order to relieve the bureaucracy of some of the odium, and avert a revolutionary catastrophe. True to the Slavistic ideas of which he was the representative, and, as such, obtained the confidence of the Czar, he elaborated a scheme for the revival of an ancient Slavic institution, the representative body called the Zemski Sobor, which the Czars before Peter the Great convoked for consultation.

The anti-Jewish agitation was connived at under the administration of Ignatieff. The liquor-sellers, who catered to the drunken habits of the peasantry; the usurers, who profited by their distress; and the merchants, who practiced deceptions from which they suffered, belonged to the Jewish race. Count Ignatieff allowed the peasantry full license in their barbarous excess, with the design of ridding the country of the Jews, who with all their faults were a useful and necessary class. The Jews petitioned for months to have a ukase issued forbidding the persecutions. The local officials, taking their cue from their superiors, in many cases permitted the outrages to take place unhindered. Jews were punished for defending themselves with weapons, while their assailants went free. The regulations restricting their rights of residence and free migration, which had long been inactive, were strictly enforced, as also the laws requiring them to close their shops on Sundays and Christian holidays. The atrocities were exaggerated in the reports published abroad, but they were sufficient to drive thousands of families out of the country, and seriously unhinge mercantile business in many parts of Russia. The worst excesses occurred in Little Russia, or the Ukrainé. A false ukase was read in some towns, declaring that the Czar gave up the Jews to the people for pillage. The belief that the persecutions were approved by the Government was generally prevalent.

The Israelites of Europe made efforts to obtain diplomatic intercessions for their brethren in Russia, but none of the Governments ventured to make representations on the subject. Sir Charles Dilke stated in the English Parliament that consular inquiries corroborated only one case of murder in Balta, a town in South Russia principally inhabited by Hebrews, where shocking riots occurred at Easter, 1882. President Arthur was freer in his promises than the heads of European Governments, declaring that he would exert himself as far as possible to induce the Russian Government to effectually protect the Jews, and that the minister in St. Petersburg had been instructed to protect the rights of American Jews in Russia.

There were five committees in European countries and one in America organized for the relief of the Jewish refugees. The number aided during the year 1881 was about 25,000, of whom some 15,000 were settled in the United States, 2,000 were dispersed over Europe, and 8,000 were sent back to Russia. The exodus

in the earlier months of 1882 was greater than in 1881.

At length, toward the end of May, and just before the dismissal of Ignatieff, it was publicly made known that the Government was resolved to punish severely all outrages against Hebrews and their property, and dismiss governors and other officials who failed of their duty in this respect.

During the twelve months of Ignatieff's ministry he not only set on foot many commissions of investigation into the causes of social and political disorders, but he took positive steps to loosen some of the fetters which aggravated certain sections of the nation. The difficulties with the Vatican were terminated to the contentment of the Catholics, who form 72 per cent of the population of Poland. The matter was not finally settled until the visit of Minister Giers to Rome in the autumn. The Pontiff obtained the right, withheld for many years, to nominate to vacant Polish sees. The use of the Polish language was allowed in the Catholic seminaries in Poland, where Polish and Russian were both made obligatory, and even in the seminary in St. Petersburg. The Poles received permission, retracted after the retirement of Ignatieff, to have a newspaper and theatre in St. Petersburg. Of greater importance were the concessions granted to the Old Believers and other sectaries, who number over 14,000, and constitute the most industrious and law-abiding class of the population of Muscovy. Practical measures for the solution of the liquor question were taken under Ignatieff. Plans were adopted for the migration of peasants from unproductive districts. With the Finance Minister he established a land-bank.

Ignatieff marked out for himself a clearer and more comprehensive policy than his predecessor, Melikoff. He was a Pan Slavist, but not an Old-Russian of the type of Katkoff and Pobodonoszeff. He formed plans which he thought would end the revolutionary crisis and satisfy the aspirations which have been seething in Russian society for half a century, and can no longer be confined by repressive measures. Another man with creative intentions would not have taken office on the pledge of the May manifesto, affirming the inviolability of the autocracy. Ignatieff, to realize his ideas, had to extricate himself from his false position, and resorted to the wiles which had earned him, when in Turkey, the epithets of "father of lies" and "Menteur Pasha." He never commanded the confidence of the public, nor did he gain that of his imperial master, though he came to be considered indispensable as the "tamer of the Nihilists," by the energetic action of the police in unearthing revolutionary conspiracies, and the fact that no attempt on the life of the Czar occurred. The outbreaks against the Jews and the Germans were permitted, not merely as an escape-valve for agricultural distress, but as a development of the anti-European spirit. Ignatieff was wise

enough to see that the empire could not be preserved, much less extended over the other Slavs, by recasting everything in the Muscovite mold. Hence he encouraged the revival of national Esthonian and Lithuanian sentiments, relaxed the restrictions on the Poles and their religion, and endeavored to place the persecuted sectaries on the same legal footing as the Orthodox. Ignatieff was obliged to present his main scheme prematurely, because his influence with the Czar was already shattered. It was to give the Russian people a voice in the government, but was prefigured as the revival of an ancient Russian institution which had nothing in common with European constitutionalism. This old representative institution was the Zemski Sobor, or National Assembly, the convocation of notables, which the Czars before Peter occasionally ordered when they wished an indorsement of their acts by the estates of the empire. Pobodonoszeff, Procurator of the Holy Synod, the Czar's old tutor, who has constituted himself the guardian of autocracy, warned the Emperor of the intent and consequences of this disguised constitutional innovation. The Cabinet voted against the project, and Count Ignatieff asked to be relieved of his post. On the 12th of June the Czar gave him his dismissal, and appointed Count Tolstoy Minister of the Interior.

The new minister appointed to deal with the problem of Nihilism, and the causes of discontent, was the same who, by introducing the classical system of Katkoff in the higher schools, when Minister of Instruction from 1866 to 1880, had aggravated the political ferment which he sought to destroy, and first caused it to take the form of revolutionary Nihilism. Among the thousands of students who were left hopeless and breadless by the change in the academical standard, the nucleus of the Nihilistic party was formed. The revocation of these rules was the first remedial measure of Melikoff. Tolstoy's elevation indicates the close of the epoch of remedial reform, and of the immediate prospect for any kind of representative government. The representatives of the policy which the Czar chose to follow—Katkoff, Pobodonoszeff, and Tolstoy—promise to restore the filial devotion of the Russian people to the Czar, and their fidelity to the national Church, by rigidly repressing all independent political and religious thought. The measures of Ignatieff for the relief and protection of the sects were rescinded. An act of the Holy Synod allowing the appointment of popes without any seminary training indicates the reliance of the ruling party on ignorance to retain the people within the fold of the Orthodox Church, and upon persecution to drive back the sectaries. The new minister, whose policy was to preserve the autocracy and the bureaucratic system, its concomitant, applied himself assiduously to reforming the abuses in the administration, which had become more flagrant than ever under Ignatieff, whose com-



plaisant nature would not allow him to dismiss a subordinate for any cause. Tolstoy was by training a rigorous bureaucrat of unimpeachable integrity, who was not inclined to suffer negligence or irregularity, apart from the consideration that the success of his policy depended on reforming the abuses of the bureaucratic government. The Tolstoy government depends principally upon lightening the burden of taxation to stem the tide of discontent, and followed the scheme of tax reform already inaugurated by Ignatieff.

Pobodonoszeff, as the Czar's representative in the Holy Synod, proposed to lay deep the foundations of loyalty and orthodoxy by turning all the public schools into parochial schools. He directed the popes and bishops to anathematize atheists and Nihilists, and strictly catechise their parishioners so as to check any tendency to freedom of thought on religion or politics. Count Tolstoy announced, nevertheless, a plan for the toleration of the "least harmful" of the sects, meaning the Old Believers of Muscovy.

**NIHILISTS.**—Ignatieff took more thorough police measures against political conspirators than Loris Melikoff, who hoped that the Nihilistic fury would abate after constitutional reforms, until the murder of Alexander II rendered Melikoff and his reforms impossible. When, after a few months of quiescence, the Nihilists again raised their heads, and published threats against the new Czar, who was securely immured in Gatchina, the police found the office of the "Tchernay Peredel," their most violent organ, and arrested there a lady of the noble class, Marie Constantinovna Kryloff, and three others. This was before the attempted murder of General Tcheverin by the young noble Sankoffsky. On February 21st the twenty Nihilists accused of being implicated in the eleven great crimes, beginning with the murder of General Mesentsoff and ending with that of the Czar, were tried and convicted, ten of them being sentenced to death as accomplices in the regicide, which sentence was commuted to hard labor in the Siberian mines. On March 30th General Strelnikoff, Public Prosecutor at the Kiev Military Tribunal, was assassinated. Notwithstanding numerous arrests the "Narodnaya Volia" appeared occasionally, and the Nihilists were evidently aiming at the life of the closely-guarded Emperor. The coronation was indefinitely postponed. In April a mine was discovered under the Moscow Cathedral, where the coronation was to take place. A plot to blow up the Kremlin was also detected. In June a band of conspirators, forty in number, was arrested in St. Petersburg. They met at the house of a veterinary surgeon, and comprised ladies, military officers, and, among others, a man filling a confidential post in the Ministry of the Exterior. The garrison of the Peter and Paul prison was discovered to be infected with Nihilism to such an extent that a considerable number of condemned persons

who were supposed to be in Siberia were found to be living in the fortress, in the enjoyment of many indulgences. The Czar never showed himself outside of his voluntary prison, except on three occasions, when he visited St. Petersburg, and on the visit to Moscow, in September, 1881.

A number of societies were formed with the object of combating Nihilism. The Sviashennaya Druzhina, or Holy League, was formed by nobles and rich merchants, and employed a great number of hired agents. It borrowed the secret method and organization of the Nihilist committees. The head of the organization was Pobodonoszeff. The Dobrovolnaya Ochrana, or Volunteer Guard, was formed of military and civil officers. It was directed by Count Vorontzoff Dashkoff, the Minister of the Imperial Household, and had the support of Count Ignatieff. This society had also a political aim, that of constitutional and land reforms, which was expounded in a journal called the "Northern Lights," published at Leipsic. Among other associations of a similar character was the Anti-Terrorist Society, still more secret and Nihilistic than the Druzhina, which stood in some relation to the police, and endeavored to spy out the movements of the Russian revolutionists in the other parts of Europe as well as in Russia.

**RUSSIA, RELIGIOUS LIBERTY IN.** The condition of the vast Russian Empire, in regard to religious liberty, or toleration of conflicting opinions and views, is anything but encouraging or satisfactory. Dissenters from the established Church of every kind and description exist largely in Russia, and, though nominally millions are entered on the records as belonging to that Church, they do not acknowledge their obligations to the Church of the land, but protest most earnestly against invasions of the rights of conscience. Religious complications frequently occur, and the Government has its hands full in endeavoring to unravel and manage these annoying difficulties. Not long since several hundreds of Tartar families in the eastern district of Ufa and Kazan abandoned the "Orthodox" or state Church, and openly gave in their adhesion to Mohammedanism, to which they had all along been attached. What to do with these and the like cases is a puzzle to the authorities. In the western district, i. e., Poland, there are large bodies of inhabitants who once belonged to the Greek-Uniat faith. Officially, as far as Government is concerned, this faith is dead, having expired some forty years ago, and those professing it are counted in with the "Orthodox." But, though not calling themselves "Uniat" any longer, many of these joined the Roman Catholic body in Russia, and refuse to be considered "orthodox." What is to be done in such cases? No one seems to know. In the south, in the heart of "Little Russia," the old conservative region, dissent has made considerable progress. The sect of

the Stundists has sprung up there, and is said to be increasing rapidly, owing chiefly to the excellent moral effects wrought on its adherents by its teachings and example. According to the law, as it now stands, all these ought to be compelled to return to the bosom of the established Church; but expostulation produces no result, and it is doubtful if persecution by force will be any more effective. The Stundists are well organized, and claim for themselves the same rights as are possessed by the Baptists and other Protestant denominations in Russia.

Some think then, that, in view of all these difficulties and perplexities, the best thing to be done is to establish universal liberty of conscience and freedom in religious matters. Not only is this best in principle, but as a matter of policy, and, for the good of the "Orthodox"

Church itself, it ought to be done. Give the Church its fair field, say the advocates of this view, and rouse up its clergy and members to a just sense of their true position and privileges; let the truth which the Church teaches have its rightful opportunity to appeal to the people on the one ground of truth and right, freed from the trammels of state interference and state control, which are odious to the masses, and the Church will not only be able to hold her own, but will commend the soundness of her doctrine, as set forth in the old Catholic creeds, to the minds and hearts of multitudes throughout the empire. Whether the Government, under the manifold evils and dangers to which Russia is now exposed, will have wisdom and discretion sufficient to meet the present emergency, is not at all certain, and yet remains to be seen.

## S

SALVADOR. (See "Annual Cyclopædia," 1881.)

SCOTT, Rev. LEVI, A. M., D. D., senior Bishop of the Methodist Episcopal Church of the United States, died July 13, 1882, on the farm near Odessa, Del., where he was born in 1802. His early life was without educational advantages, and he was brought up on the farm and only attended school during the winter. He undertook to learn the trade of tanner when sixteen, but after four months' work he abandoned this, and then took up carpentering at Georgetown, D. C. His health, however, gave way after a short time, and he returned to the farm and followed the pursuit of a cabinet-maker until he was twenty-one. At this time he was converted, and thereafter devoted himself to preparation for the ministry. In 1826 he was appointed by the Philadelphia Conference to Talbot Circuit, Maryland, and in the next year was transferred to the Dover Circuit, Delaware. The following year he was ordained deacon, and appointed to the St. George's charge, Philadelphia, which he retained until 1830. In this latter year he married Miss Sarah H. Smith, of Westchester. His health breaking down from excessive labor, he was compelled to ask for a supernumerary position. He was placed on Kent Circuit, Maryland, in 1833, where he remained but one year, being made presiding elder of the Delaware district in 1834. From this time on he occupied various positions in the Church, always with great credit. In 1840 he became principal of Dickinson College Grammar School, in which position he continued three years. In 1840 the Wesleyan University conferred on him the degree of A. M., and six years later the college of his native State conferred upon him the honor of D. D. In 1848 he became assistant book agent of the Methodist Book Concern of New York. In 1852 he was elect-

ed a bishop, in the official work of which office he was actively engaged until 1872. A few years before his death he was stricken with paralysis and deprived of his faculties, which he never recovered.

SERVIA, a kingdom in Eastern Europe, formerly a province of the Turkish Empire, which became self-constituted in 1829, and was acknowledged to be completely independent in the Treaty of Berlin. The executive power resides in the King, assisted by seven ministers. The legislative authority is vested in the King and the Skuptchina, or National Assembly, which consisted in 1882 of 160 members. The King appoints 40 members, and the rest are elected by the citizens paying direct taxes, at the rate of one member to 2,000 electors. The Senate, which existed formerly, was transformed by the Constitution of 1869 into a Council of State, charged with the elaboration of laws, but without legislative functions.

The members of the ministry are as follows: President of the Council and Minister of Foreign Affairs, M. Pirotchanatz; Minister of Justice, D. Radovitch; Minister of Finance, T. Miyatovitch; Minister of Public Works *ad interim*, M. Garashanin; Minister of War, General T. Nikolitch; Minister of Public Instruction and Worship, S. Novakovitch. Garashanin was Minister of the Interior until his unpopularity, due to repressive regulations, led to his retirement in the latter part of 1882. There is no nominal occupant of the Ministry of the Interior since his resignation.

Prince Milan Obrenovitch, who was born in 1855, and succeeded to the throne after the assassination of his uncle, Prince Michael, was proclaimed King by an act of the Skuptchina of March 6, 1882. General Tcherniaieff proclaimed Milan King of the Servians in 1876, during the Servian war with Turkey, but the act was disavowed by the Government, of



which Ristich was then the head. The Servian Government did not accede to this elevation, through the opposition of Austria. Since the preponderance of her influence over the King and Government, the fears of Austria have been removed. During the troubles with Herzegovina, the Prince understood that there were no objections to his assumption of the royal title. The Hapsburg Government hoped by this guarantee of the independence and inviolability of Servia to appease the anger of the Servians at the measures taken for the subjugation of the Herzegovinians, and to arrest the revival of great Servian aspirations.

Obren, from whom the reigning house of Servia has its name, was a wealthy Knez, or chief, of the last century, whose widow married a clansman, and by whom she had a son, Miloch Tcho, the founder of the dynasty. This young farmer distinguished himself at the siege of Belgrade when the Servians, under the Haiduk leader, Kara George, wreaked vengeance for centuries of tyranny upon the Turks. When independence was established in 1804, there followed the long conflict between the Haiduks and the Hospodars, or Knez. The Servians are democratic by nature, and the popular party won and placed its leader, Black George, at the head of the state. After the reconquest by the Turks in 1814, and their terrible reprisals, they found a tool in Miloch, who had succeeded to the estates of Obren. This Hospodar was the supporter and adviser of the vizier Solymán in his tyrannies, and became the possessor of unlimited wealth. After wreaking vengeance on his rivals, he saw the way clear for a bold stroke, and, playing false to the Turks who had conferred on him the opportunities for plunder and made him Overknez of his district of Rondnik, he joined the combatants for liberty who held the mountains, and proposed to them to take the lead of the rebellion. The revolt was successful with the aid of Kara George, who came back from exile. Miloch betrayed the former prince to the Turks, and every other dangerous rival he assassinated, but the people supported him as their only hope of liberty, and he succeeded in making peace at last on favorable terms. The position of the new ruler of Servia was strengthened year by year, but never defined until in 1829 he summoned the Skuptchina, the Parliament which had been established by Kara George in place of the smaller Soviet of Turkish times, and after surrounding them with soldiers made the request that they should swear allegiance to him as hereditary Prince of Servia, and petition the Sultan to recognize him in that capacity. A firman came from Constantinople granting full autonomy to the Servians, and commuting the Turkish taxes into an annual tribute. Miloch proclaimed a constitution embodying Greek and Slavic customs, and declaring all Servians free and equal. Each commune was obliged to pay indemnities for the crimes of its members, and deliver up the culprit to justice. Miloch ruled

as a capricious despot, never summoning the Skuptchina, and entirely unrestrained by the constitution, or by the new one which he produced when called to account for his tyrannies by Russia. Avarice was his ruling passion, and his methods of extortion were more intolerable than Ottoman exactions. In 1839 the outraged Servians revolted. Miloch abdicated in favor of his popular oldest son, Milan. A Skuptchina installed Milan and his brother Michael as joint rulers with greatly restricted powers, but three years later they were driven out by the adherents of Kara Georgevitch, the son of the liberator. In 1859 the house of Obrenovitch was restored by another revolution, in the person of Prince Michael, the first enlightened ruler that Servia ever knew. He was succeeded by his nephew, Prince Milan, now King. The house of Obrenovitch was first formally recognized by Europe as hereditary princes of Servia in 1869.

**AREA AND POPULATION.**—The area of Servia is 48,590 square miles. The computed population on December 31, 1880, was 1,700,211, as compared with 1,669,387 as returned in the census of 1878. Of the latter number, 865,422 were males and 834,789 females. The population in 1866 was divided among the different nationalities in the following proportions: Serbs, 1,058,189; Wallachians, 127,545; Bohemians, 24,607; Germans, 2,589; other nationalities, 3,256. The population belonged to the Greek Catholic Church with the exception of 2,049 Israelites, 6,306 Mohammedans, 4,161 Roman Catholics, and 463 Protestants.

Belgrade, the capital, contained in 1878, exclusive of the garrison, 26,970 inhabitants, and about 80,000 in 1882. The next largest town is Nish, with about 20,000 inhabitants.

**COMMERCE.**—The principal commercial intercourse is with Austria. The only other trade is with Turkey and Roumania. The chief article of export is live hogs, which feed in great herds on the acorns, which abound, and are driven to the markets in Hungary and the adjoining parts of Austria. The extent of the foreign trade for the three years last reported was, in francs, as follows:

YEAR.	Exports.	Imports.
1878.....	\$81,711,207	\$26,675,688
1874.....	85,881,876	81,788,196
1875.....	85,014,874	81,219,248

The quantities of the leading exports in 1875 were as follows:

EXPORTS.	Quantities.
Cereals (kilos).....	24,961,742
Cattle (number).....	24,586
Hogs (number).....	867,643
Sheep and goat skins (number).....	1,117,184

**FINANCE.**—The revenue is derived mainly from direct imposts, including a general poll-tax. The budget for 1881-'82 places the total receipts at 32,635,000 dinars (1 dinar = 1 franc), derived as follows: Capitation tax, 11,600,000 dinars; patents, 150,000; customs, 4,200,000;

food-taxes, 750,000; tobacco excise, 900,000; salt monopoly, 400,000; tobacco monopoly, 250,000; mining monopoly, 40,000; liquor excise, 800,000; fees, 1,600,000; public property and enterprises, 1,770,000; receipts of fund for public instruction, 1,050,000; of fund or public sanitation, 900,000; sinking fund of public debt, 2,575,000; balance in the Treasury, 2,000,000; other receipts, 10,175,000. The expenditures were estimated at 32,616,192 francs. The chief items were 7,409,937 francs for the service of the public debt, 8,933,595 for war, 4,846,747 for the Ministry of the Interior, 2,636,389 for the Ministry of Education and Worship, and 2,408,820 for the Ministry of Public Works.

By the financial operations of the present ministry the public debt has advanced to over 100,000,000 francs. It consisted before of a small internal loan and the foreign loan of 20,000,000 francs, both raised to pay the cost of the Turkish War. The Government was involved in losses through the failure of the Union Générale and its Austrian branches. These were variously reported to be from 17,000,000 francs to much larger amounts. The Austrian Treasury in some indirect way came to the assistance of Servia, and by its sacrifices aided in extricating the King's Government from its embarrassment.

**POLITICS AND LEGISLATION.**—The political crisis, which began with the refusal in 1880 of Ristich, the Liberal Premier, to sign a commercial treaty with Austria and to agree to the Austrian railroad prospectus, reached its climax in 1882. The treaty was thought by the Minister and the Skuptchina to confer unequal benefits upon Austria and the railroad convention to be designed to convert the Servian railroads into strategic routes for the use of the Austrian army in the event of a war with Russia. A threatening note from Vienna drove Ristich to resign. The new Skuptchina was elected through Austrian influences. Pirotchanatz took the helm. The treaty was concluded, and the railroad convention approved. The construction of the railroads was undertaken by the Union Générale of Paris. The failure of this enterprising society in February, occurring at the time when the Servians were excited by the conflict between Austria and their neighbors of kindred race, the Herzegovinians, caused the struggle to be renewed. The Radicals interpellated the Government with regard to the losses sustained by the nation through the failure of Bontoux's company. Pirotchanatz made evasive and unsatisfactory replies. On the refusal of the ministry to give the information demanded, fifty-five members left the House and resigned their seats. This reduced the Skuptchina to less than the three fourths necessary for a constitutional quorum. It suspended its sittings pending the elections to the vacated seats, which took place in May. Of the members who had thrown up their mandates, forty-nine were again returned,

though the Government had exerted a pressure on the constituencies which was unexampled even in Servia. The King and his ministers had alienated the entire population. The opposition had started with the friends of democratic doctrines, of whom there were forty in the Skuptchina elected to carry out the designs of Austria. The Prince, in humbling himself to Austria and sacrificing Servian interests, aided in the spread of these advanced ideas. The party obtained a strong hold among the rural population. The adherents of Ristich joined them. The clergy, with the Russophile Metropolitan Michael at their head, threw the weight of their influence into the scale. The Government took the unfortunate course of deposing the Metropolitan Michael. Other violent acts added to the general detestation that was felt for the King and his Cabinet. A breach of the Constitution was committed in a neglect to order a general election after the resignation of the fifty-five members, but the newly-made King would not have felt safe on his throne if he gave the country an opportunity to express its condemnation and antipathy. The return of the forty-nine members placed the Government in the same dilemma as before. Pirotchanatz was alarmed and confounded, and immediately offered his resignation. The Radical party offered the terms on which they would allow the government to go on. These were, that they should be taken into the committees of the House and have the just share in legislation which had been denied them, and that steps should be taken to call a Great Skuptchina to revise the Constitution and secure the larger liberties demanded by the whole nation. The King ordered Pirotchanatz to remain at his post, and procure a majority and a quorum by any means. The elections of the returned Radicals were pronounced null and void by the rump Assembly, and the candidates next on the poll-lists declared elected. To give them their seats without certificates of election, which the local authorities refused to make out, was the final act of the *coup d'état*. The mock Assembly sat a few weeks, and then adjourned to avert danger. The frame of the popular temper was critical in the extreme. If it had not been for fear of provoking an Austrian military intervention and bringing worse ills upon their country, the Servians would have chased their King out of his dominions. The anger of the people found an exponent in Ilka Markovitch, a political enthusiast, who made an attempt on the life of King Milan on October 28d. This lady was moved to the act by a private grievance in addition to motives of fanatical patriotism: her husband, a valiant officer, had been shot without cause, by orders of a military tribunal, during the Turkish War, and her property confiscated by the Government. The King was in consternation, and turned to Ristich, endeavoring to rally to the support of the throne



the Liberals as well as the Progressists. The Cabinet again offered their resignations, but the King induced them to remain, declaring that he did not intend to change his advisers, but wished to unite the friends of authority and order against the revolutionary demands of the Radicals. The adherents of Ristich, who had followed a philo-Russian policy, and those of Pirotchanatz, who would reduce the country to political and economical vassalage to Austria, were mere coteries, while the majority of all classes were inimical to the King and the system with which Pirotchanatz and Ristich were identified. The most intelligent classes, as well as the main body of the people, were imbued with the democratic doctrines of the Radical party. These doctrines showed the influence of the socialistic theories of Bakunin. The demands of the party were, democratic institutions, complete freedom of speech and the press, a radical readjustment of taxation according to advanced theories, and the largest development of local self-government.

**SEWAGE DISPOSAL.** A sanitary and engineering problem of the highest moment is the question of the disposal of city sewage, and of its utilization in restoring the abstracted elements to the soil. The question of sewage disposal is simpler and also more urgent on the Continent of Europe, where the English system of sewers for the reception of all waste and excrementary matter has not been generally introduced. Among German and other Continental sanitarians the sewer-pipe system is now generally condemned.

The people of Paris have long desired to get rid of their barbarous and unwholesome system of privy-vaults and night-carts. The happy results of the utilization of the sewage for fertilizing purposes at Gennevilliers suggested the plan of connecting the vaults with the sewers and turning the whole of the night-soil, which amounts to five or six million pounds per diem, into the general sewerage, to be conducted away to enrich the soil in the depths of the forest of St. Germain or some more distant region. Physicians and hygienists protested on account of the dangers of the exhalations from the vents and culverts and the conveyance of the germs of disease to the lands to be manured. Berlier's system of pneumatic voidance was devised to meet this want. It has been applied on a scale sufficient to test its merits in the Pépinière barracks, which lodge one thousand men constantly. The water-closets empty into a cubic receptacle, which contains a sieve for the retention of foreign substances. The sieve can be shaken from the outside to allow all decomposable matter to pass through. The receivers communicate with a number of cylindrical vessels. The cylinder contains a large float, which ends below in a rubber globe fitting tightly in the aperture of the outlet-pipe. When enough material has entered to raise the float, it is rapidly evacuated by reason of the difference of air-pressure in the

pipe and outside. The rubber valve then closes again the conical orifice of the evacuating-pipe. A vacuum of fifteen centimetres of mercury is sufficient for the operation. The active circulation of the air in the pipes produced by the aspiration of the air-pump has the effect of thoroughly mixing and liquefying the excremental materials. This prevents the stoppages in the pipes which occur when pneumatic pressure is employed. The material is drawn into a reservoir in the works at Levallois-Perret, from which it is distributed by means of a force-pump to distances of from fifteen to thirty miles. An engine of twenty-horse power drives both the air-pump and the rotary force-pump. The air-pump is of the hydro-pneumatic type, in which the piston works in water. It is much more powerful than is needed for the purpose, being capable of producing a vacuum of seventy centimetres of mercury in a few minutes. No smell escapes from the receiving or voiding apparatus or the iron pipes with joints of lead.

In Dantzic, Berlin, and Breslau the sewage has been applied to irrigation with satisfactory results, economical and sanitary. The system of filtering and precipitation with chemical agents was tried in Germany, but the purification was imperfect. The plan of conducting the sewage waters upon farming-lands was adopted. The water is cleansed of the grosser solids before being pumped into the conduits. At Dantzic, about a third of a sandy tract of 1,250 acres has been fertilized, and is rented for gardening at from \$20 to \$28 an acre. The company which built and carries on the works has the use of the land for thirty years. The death-rate has diminished 21 per cent. The surplus water, which is drained into the Vistula, retains one eighth of the organic matter, one sixth of the ammonia, and one half of the mineral impurities of the original sewage-water. The municipality of Berlin bought two large tracts, one of which, at Osdorf and Friederikenhoff, has been reclaimed with the sewage, and lets for high rents. Breslau disposes of its sewage on the same plan. The lands irrigated with these rich liquids are said to be not insalubrious. When the plots of waste land on which about a foot of the solids have been allowed to accumulate are dried and broken up no ill odors or unhealthy exhalations are given off. The German experience of this method of turning noxious drainage-matter into a means of supporting life is that the expenses of pumping, etc., are abundantly recovered.

Schloesing's process of precipitating by refrigeration the ammonia of excremental matter in the form of ammoniacal phosphate of magnesium supplements Berlier's methods of successfully removing the most dangerous and offensive portion of the refuse of great cities and rendering it useful.

The system of Hanson for the purification and utilization of sewage has been in use at

Tong, near Bradford, in England, for several years. Black ash-waste, a by-product of alkali-works, is used in conjunction with lime in the purification, and is said to remove the germs of infection. There is from one and a half to two tons of waste produced for every ton of soda. The waste contains the sulphur used in the pyrites-kiln, amounting to one fifth or one sixth of its weight. It is in the form of sulphide of calcium, and under the action of the atmosphere becomes the disulphide. Brought into contact with caustic lime this precipitates in the forms of monosulphide and sulphate, carrying off all the sewage impurities. These deodorizers are stirred with the sewage in cisterns, and the sewage is then conducted into settling-tanks. The residuum is used as manure. The sewage furnishes the hydraulic power to work the apparatus.

SKOBELEFF, MICHAEL DIMITRIEVITCH. This illustrious Russian general died at Moscow, July 7th, of a stroke of apoplexy, before he had passed the thirty-seventh year of his age. Born near Moscow, in October, 1845, the son of an officer of the Guards, and grandson of a distinguished general who had risen from the ranks, he studied at the University of Moscow; but, being expelled for engaging in a students' riot, he obtained a commission in the Guards, and, serving in Poland in 1863, was promoted to a captaincy. He served in the Caucasus a couple of years, and then in Central Asia, winning the reputation for daring courage which was the source of his magnetic influence over the soldiery, and the secret of his success. He was made a colonel, and attached to General Kaufmann's staff. He took part in the expedition against Khokand, and on one occasion is said to have ridden with 150 Cossacks into the enemy's camp the night before the proposed attack, and caused the whole force of 6,000 or 7,000 to throw down their arms and take to flight in terror.

In this campaign he was promoted to the rank of major-general. He was given the command of the next year's expedition, and at the head of 4,000 men he subjugated Khokand. While officiating as governor of the new province, the Turkish War broke out. Skobelev hastened to the seat of war, and was one of the first to cross the Danube, which he accomplished on horseback. He held no command at first, but as a leader of forlorn hopes and volunteer for every dangerous and difficult service he was one of the most conspicuous figures in the army. In the second attack on Plevna he led three regiments, and, after holding the captured position twenty-four hours, fell back for lack of support with a loss of nearly three fourths of his detachment. He was afterward placed in command of his famous Sixteenth Division, with the rank of lieutenant-general. He turned back the left flank of the Turkish army at the passage of the Balkans. He took the village of Shenova from Vessel Pasha, after Mirsky and Radetsky

had failed. He led the advance upon Adrianople, proceeding by forced marches, and then advanced to occupy Tchataldja. Skobelev took a watchful interest in the welfare of his men. His division was the best fed and best clothed in the Russian army, and not infrequently their general advanced money from his private means to secure their comfort. General Skobelev was a brilliant strategist, and, being always near his men in battle, could manoeuvre them more effectively than the generals who kept in the rear.

In 1880 General Skobelev was placed in command of the expedition against the Tekke-Turkomans. The impetuous hero of Plevna here showed himself more cautious than his predecessors, and through his prudence succeeded where they had failed. Before advancing upon Geok Tepe he had a railroad of considerable length constructed, and forwarded ample supplies of ammunition and provisions. With 10,000 troops he subdued the 40,000 Turkomans of the Akhal-Tekke country, his losses amounting to 937 men. He wished to advance to an oasis south of Merv, but was recalled by the Czar, who feared embroilment with Persia. A speech made by Skobelev in Paris, to the effect that a conflict was unavoidable and imminent between Russia and the German powers, caused some political anxiety in the early months of 1882.

General Skobelev was a tall, slender, active man, of intellectual features. He required unquestioning obedience to his orders. He lost no occasion for exhibiting to his soldiers his own reckless bravery. He dressed himself conspicuously in white, and rode a white horse in battle, wearing his neatest uniform, displaying his decorations, and carrying a jewel-hilted sword.

SMITH, JOHN COTTON, D.D., rector of the Church of the Ascension, New York city, died at his home, January 9, 1882. Dr. Smith came of a distinguished New England family, his father, Thomas M. Smith, having been President of Kenyon College, and his uncle, John Cotton Smith, at one time Governor of Connecticut. He was born at Andover, Mass., August 4, 1826. Graduating from Bowdoin College in 1847, he studied divinity at the Theological Seminary at Gambier, O., and in 1850 was ordained priest. In 1852 he became assistant minister at Trinity Church, Boston, where he remained nearly eight years. In 1860 he entered upon the duties of rector of the Church of the Ascension, New York, in which position he remained until his death. As the head of a wealthy congregation, Dr. Smith was engaged in many and various works of a charitable and reformatory nature. He was greatly interested in the subject of tenement-house reform, and gave much attention to mission and industrial schools, in which he was amply supported by the liberality of his congregation. Among the works carried out by members of his church were the building



of Ascension Hall and the Church of the Holy Spirit at Gambier, O., where he received his theological education, Aspinwall Hall, and the Alexandria Theological Seminary, and the Church of the Ascension at Ipswich, Mass., the charge of which latter he was accustomed to assume during his yearly vacation. As a churchman he was liberal in his views and sympathies, and did much to strengthen and foster this spirit. As a consequence, he was in sympathy with Christian work without regard to denominational limits. He was alive to the movement of modern thought, and frequently discussed scientific, literary, and social subjects and their relation to Christianity. He was an eloquent preacher and scholarly writer. Among his published writings are: "The Liturgy as a Basis of Union"; "The Charity of Truth"; "The Church's Law of Development"; "Oxford Essays and Reviews"; "The Homeric Age"; "The Principles of Patriotism"; "The United States a Nation"; and, "Evolution and a Personal Creator." He was the editor for some years of "Church and State," a paper started as the representative of the liberal branch of the Church. Dr. Smith was personally greatly esteemed by his congregation, and held in affectionate regard by the many poor in whose behalf he had so long labored. He leaves a wife and four daughters and two sons.

**SOUTH CAROLINA. STATE OFFICERS.**—Governor (elect), Hugh S. Thompson; Lieutenant-Governor, J. C. Sheppard; Secretary of State, J. N. Lipscomb; Comptroller-General, W. E. Stoney; Treasurer, J. P. Richardson; Attorney-General, O. Richardson Miles; Superintendent of Education, A. Coward; Adjutant and Inspector-General, A. M. Massigault; Commissioner of Agriculture, A. P. Butler; Railroad Commissioners, M. L. Bonham, T. B. Jeter, L. J. Walker. United States Senators, Wade Hampton, M. C. Butler. Members of Forty-seventh Congress, D. Wyatt Aiken, J. S. Richardson, J. H. Evins, E. W. M. Mackay, Robert Small (colored). Members-elect of Forty-eighth Congress—First District, Samuel Dibble; Second District, George D. Tillman; Third District, D. Wyatt Aiken; Fourth District, John H. Evins; Fifth District, J. J. Hemphill; Sixth District, G. W. Dargan; Seventh District, E. W. M. Mackay.

**FINANCIAL CONDITION, ETC.**—On retiring from office at the close of the year, Governor Johnson Hagood concluded his message to the Legislature by the following cheering statement as to the condition of the State: "The exhibit before you of the affairs of the State is that of a well-ordered, smooth-working, and economic government, and of a happy and prosperous people." The report of the Comptroller-General for the fiscal year ending October 31st seems to justify Governor Hagood's utterance. According to that report, the total bonded debt of the State is \$6,571,825.43, made up as follows:

Consols (valid).....	\$5,429,928 54
Deficiency bonds.....	501,992 24
State scrip, Agricultural College.....	191,800 00
To be funded for <i>ante-bellum</i> principal and interest.....	168,924 47
To be funded for <i>post-bellum</i> principal and interest.....	173,512 50
To be funded for "fundable interest".....	108,289 68
To be funded for bills of the Bank of the State.....	875 00

Total..... \$6,571,825 43

The annual interest on the above is as follows:

On funded debt (\$6,123,720.78) at 6 per cent....	\$367,423 25
On debt not yet funded (\$448,104.65) at 6 per cent	26,886 28
Back interest on deficiencies, 1879-1881.....	200 00

Total..... \$394,509 53

To pay this interest a tax is authorized of three and one tenth mills. The total value of the real property in the State is \$85,384,863; of the personal property, \$45,180,179; and of the railroad property, \$14,877,250, making an aggregate of \$145,442,292.

The revenues of the State for current expenditures are derived from the net earnings of the Penitentiary, which amounted this year to \$40,000; from the royalty on the produce of the phosphate-mines, amounting to \$138,254; and from a general tax of one half of a mill on the dollar of taxable values. This last-named tax and the tax for interest on the public debt make the total general tax amount to three and six-tenths mills.

As the interest upon the State debt is payable before the general tax is fully collected, the Legislature has authorized in each of the past two years a temporary loan in anticipation of the taxes. While this is readily effected at small expense when the money market is easy, a time might come in which it would be more difficult or impracticable. To insure the maintenance of the public credit at all times, Governor Hagood made the following recommendation to the Legislature:

The debt will soon mature, and to refund it at a more favorable rate of interest is an end to be kept steadily in view. A failure to meet promptly the interest under any circumstances would injuriously affect this purpose. Again, our taxes are paid semi-annually, and the first payment is optional, the taxpayer being charged interest if he defers payment of his whole tax till the time of the second payment. Under these circumstances, to return to a collection of the taxes for interest before the interest is due, it is necessary to make the first semi-annual payment of taxes compulsory, and then for one year to increase the tax levy sufficiently to raise the sum for which, in the experience of the Treasury, it has been found necessary to make over-drafts upon the banks. We are experiencing a period of exceptional prosperity, and there will be no better time to accomplish this desirable end. If the measure commends itself to your honorable body, the additional sum to be raised this year will be about \$100,000, and will necessitate the addition of  $\frac{3}{8}$  mill to the  $3\frac{1}{8}$  mills previously estimated. The whole tax levy will then be  $4\frac{1}{8}$  mills. The levy for last year was  $4\frac{3}{4}$  mills. It will still be necessary for one year longer to authorize the temporary loan, because the first payment of interest for 1884 will occur before any part of the tax you now authorize is collected, and will have to be met out of funds now in the Treasury, which are not sufficient for the purpose, and at the same time to carry on the government until the taxes of 1883 are collected.

After meeting all the demands of the fiscal year, there is a cash balance in the Treasury, available for the ensuing year's expenses, of \$98,017.47. The estimated annual expenses of the government, including those of the Legislature, amount to \$305,460, which, with the interest on the debt, \$394,509.53, makes the total amount to \$699,969.53.

Speaking of the indebtedness of South Carolina, Fisk and Hatch say:

The interest on the State debt is promptly and regularly paid every January and July on the consols either at the State Treasury or in New York, and on the "deficiencies" at the State Treasury. . . . The present government seem to be in earnest in their intention to keep faith with the public creditors. The taxes are honestly levied and carefully collected. The revenue is kept at a point where all claims can be undoubtedly met, and the affairs of the State are economically administered.

**EDUCATIONAL.**—During the year there has been a marked increase in the number of schools, in the number of teachers employed, in the school attendance, and in the school fund. The number of schools is 3,183; of teachers employed, 3,413, of whom 1,287 were colored; of school attendance, 65,399 white, and 80,575 colored. The exact amount of the school fund for 1882 has not been ascertained, as full reports of the school taxes collected during the fiscal year have not been made to the Comptroller-General; but sufficient is known to warrant the conclusion that the fund is considerably in excess of that reported last year, which amounted to \$452,965.44. The average length of the school session throughout the State has been four and one half months. The school law of 1878 created a State Board of Examiners, consisting of the State Superintendent of Education and four persons appointed by the Governor, by and with the advice and consent of the Senate, who constitute an advisory body, with power to review all decisions of the county boards, to adopt rules for the government of public schools, to prescribe rules for the examination of teachers, to prescribe and enforce the course of study, and to appoint in each county two persons who, with the County School Commissioners, shall constitute the Board of Examiners of the several counties of the State. Marked improvement is observable in the character and attainments of the teachers, owing to the good effects produced by the State Normal Institutes—one for white and one for colored teachers—maintained in part by State appropriations and in part by the trustees of the Peabody fund. By constitutional provision it is made the duty of the Boards of County Commissioners of the several counties to levy and collect an annual tax of not less than two mills on the dollar of all the taxable property in their respective counties for the support of the public schools. The proceeds of this tax and of the poll-tax constitute the school fund. Since the adoption of this amendment of the Constitution the school-tax has steadily increased every year, owing in great measure to

the increasing wealth and prosperity of the State, and partly to a more rigid and honest collection of the poll-tax. The opportunities now offered for higher education in South Carolina are greater than at any time in her past history. The South Carolina College and the State Military Academy have been placed, by liberal appropriations by the General Assembly, upon a broad and liberal basis, and a large number of students are now in attendance at both institutions. The branch of the university, known as the South Carolina College, situated at Columbia, is endowed with the portion of the fund donated by Congress which is set apart for the benefit of white students. It was reorganized in the spring of this year by the establishment of five additional professorships, making ten in all, and one of which is agriculture and horticulture. It opened with one hundred and forty-eight students in attendance. Governor Hagood made the following suggestions in his last message to the Legislature in regard to the course of instruction to be pursued:

The development hereafter to be given to this institution should, in order to meet the just expectations and demands of the age and the requirements of the Act of Congress, to which it owes all of its permanent endowment, be largely in the direction of applied science. It should be made the home of the practical arts and sciences as well as of the classics. It should be able to send forth the youth of the State well equipped for the practical pursuits and avocations of life, and hence technical training should be as anxiously provided for as liberal culture.

The agricultural department should be so developed as to materially aid in building up the agricultural interests of the State. Not only should the opportunity be given to the rising generation of farmers to acquire the scientific principles upon which their calling is based, but the farmers themselves should have the benefit of the experiments and tests of a well-conducted experimental farm located in their midst.

The Military Academy, which, previous to the war, was second only in thoroughness of instruction to that at West Point, and whose active operations were interrupted in 1865 by the Federal Government taking possession of its building, known as the Citadel, was reopened on the 2d of October, the building having been restored to the State in March. There are 177 cadets in attendance, of whom 68—two from each county—are maintained by the State as beneficiaries, and are required for two years after their graduation to teach in the public schools of the county from which they receive their appointment. They are taught, clothed, subsisted, and supplied with the necessary academic appliances free of charge. The other students pay \$300 per annum, which is the estimated cost of the institution of each cadet. The Academy has been made by law a branch of the university. In addition to these State institutions, there are also in active operation the College of Charleston, Furman university at Greenville, Erskine College at Due West, Wofford College at Spartanburg, Newberry College at Newberry, and Adger College at Walhalla.



Clafin College, also a branch of the university, at Orangeburg, is set apart for the benefit of colored students. It is endowed with a portion of the fund donated by Congress for the promotion of agriculture and the mechanic arts, with small aid to its normal school from the Peabody fund. There have been 344 students in attendance, of whom 24 were in the Collegiate Department, 136 in the Normal School, and 184 in the Grammar School. The Normal School is probably doing the most important work. Both graduates and under-graduates find ready employment in the public schools for colored children in the State. An agricultural farm of 150 acres is attached to the institution, and is profitably worked, chiefly by students' labor, under the instruction of a superintendent.

During this year the trustees of the Peabody fund appropriated to South Carolina \$5,375, of which \$3,225 were devoted to the education of teachers, and \$2,150 to the public schools. The total number of persons in the State between the ages of six and sixteen years is as follows:

	Whites.	Colored.	Total.
Male.....	51,440	90,897	142,337
Female.....	49,749	89,573	139,322
Total.....	101,189	180,475	281,664

**THE LUNATIC ASYLUM.**—In scientific treatment, and in all that promotes the comfort and well-being of its afflicted inmates, the Lunatic Asylum of South Carolina compares favorably with those of other States. The Legislature and people regard this benignant charity as one which patriotism, philanthropy, and Christianity demand that they should support liberally; and, having intrusted the management and immediate control to a wise and capable board of regents and superintendent, they freely give those officers the necessary means to maintain the patients in comfort, and at the same time to make such repairs, improvements, and additions to the buildings and grounds as the condition of the institution and the increasing number of those asking admission may require. The number of patients under treatment during the year was seven hundred and fifty-five, who, with the exception of very few who are supported by their relatives, are maintained altogether by the State. The superintendent has successfully adopted, to a greater extent than in other asylums, the policy of "release on probation." He believes that it is beneficial to certain classes of patients—such as those who, after considerable progress to restoration, cease to improve; some cases of melancholia, not suicidal, which, after several months' residence, instead of being benefited, are still more depressed by the surroundings of the asylum; the large class whose constant fretting to go home counteracts all other influences; and those whose physical condition would probably be benefited by the change. The policy has also proved advantageous as affording means

to determine whether restoration to reason has been really established, or whether it is merely the intermission of recurrent insanity. During the year ninety-three patients of the above classes were sent home, of whom thirty-five have been discharged as cured, thirteen as improved, six as unimproved, yet able to be cared for at home, six have died, eighteen recently released are at home, and sixteen have returned. Of the present inmates, 54 are regarded as curable, 87 doubtful, and 409 incurable. The receipts of the asylum for the year—of which the State contributed \$114,315.92—were \$119,868.63, and the expenses, including repairs, improvements, and extension of grounds, \$119,466.20. The per capita cost of maintenance is \$140. There is a farm attached to the asylum, the chief advantage of which is that it affords healthful employment to the patients, but it is also a source of material profit. Of the 550 patients now present, 330 are white and 220 colored. Of the sixty increase during the year, twenty-seven were white and thirty-three colored; and a comparison of this report with those of previous years, shows that the proportion of the colored to the white insane is steadily increasing.

**THE INSTITUTION FOR THE DEAF AND DUMB AND THE BLIND.**—This institution for the education of the unfortunate youth of the State is located at Cedar Springs, in Spartanburg County. During the year sixty-two pupils have been in attendance. Steps have been taken to provide for the colored deaf and dumb and blind children.

**THE PENITENTIARY.**—On November 1st there were 824 convicts in the Penitentiary, of whom 778 were colored and 46 white. Of these, 224 were leased to the phosphate-mining companies, 121 to the railroads, 25 were employed on the farm, and 454 kept within the walls of the prison. Of those in prison, 97 were employed making shoes, 120 on the Columbia Canal, and the remainder at various minor industries. The report of the superintendent exhibits the following figures: Balance on hand at the beginning of the fiscal year, \$21,199; earnings for the year, \$94,236; expenses proper of the Penitentiary, \$50,989; per diem and mileage of Board of Directors, \$1,267; paid on canal, \$8,096; paid into the treasury, \$40,000; and remaining in hands of superintendent, \$14,901. In the period from 1863 to 1876, besides the earnings of the convicts, it required an average annual appropriation of \$62,800 from the State Treasury to support the institution. The convicts, under the present system—both those within and without the prison—are well fed and clothed, properly cared for generally, and their sentences of penal servitude humanely executed.

**THE DEPARTMENT OF AGRICULTURE** has only been established for two years, but, under earnest and judicious management, its great usefulness is already manifest. This department of the State government is maintained

by the proceeds of a tax of twenty-five cents per ton on the sale of commercial fertilizers in the State, which realized this year \$23,704. It is charged with the inspection and supervision of the sale of fertilizers; with the duties of a Fish Commission; with the management of the State's interest in the phosphate-mines; with the development of the agricultural and mechanical interests of the State, and with the promotion of immigration. The following are the general results of agricultural operations in South Carolina in 1882: There were planted in corn 1,356,305 acres, which yielded 17,045,735 bushels, or 12½ per acre. The increase in yield over that of 1881 was 110 per cent. The area in oats was 362,373 acres, against 258,343 acres in 1881—an increase of 40 per cent. The yield was 7,929,970 bushels, or an average of nearly 22 bushels per acre—an increase as compared with 1881 of 170 per cent. The yield of wheat increased 97 per cent over that of the previous year, averaging 9½ bushels per acre. The increase in acreage was 20 per cent, or 34,846 acres. The yield of sugar-cane increased 146 per cent. The average product was 127 gallons of sirup per acre. The increase in the yield of sweet-potatoes was 80 per cent; average production 95 bushels per acre. The acreage in cotton decreased 3 per cent as compared with 1881, yet the yield increased 114,500 bales of 500 pounds each; an increase of 26 per cent. The average product was 198 pounds of lint-cotton per acre. The money value of the crops of South Carolina in 1882 exceeded that of 1881 by \$18,572,525. In addition to the increase in other farm products, the record for the year shows an increase of the crops of 1882 over those of the preceding year of 28,193,277 pounds of rice; 198,677 gallons of sorghum-molasses; 181,838 bushels of Irish potatoes; \$42,243 in sales of garden produce; 49,787 pounds of honey; 324,056 pounds of butter; 58,522 head of poultry, and 179,626 dozen eggs. Twenty-five per cent of these large crops were fertilized with home-made composts, and 10 per cent less commercial manures were purchased than in 1881. The value of the *excess* of the products of 1882 over those of last year amounted to more than the entire value of the farm supplies bought in 1881. The farmers sold large quantities of grain, and kept an abundance for home consumption. The most valuable and beneficent of the products of South Carolina are the apparently inexhaustible phosphate deposits of the Charleston Basin, whose value was first discovered in 1867, and whose importance to the agricultural world it would be difficult to measure. In 1870, three years after the discovery, the shipments of phosphate rock were only 1,989 tons. In 1882 the shipments were 140,772½ tons. These phosphate deposits in the rivers, creeks, marshes, and lands on the coast of South Carolina are the most valuable property that she owns, and the royalty of \$1 per ton on the amount of

rock mined, which the mining companies pay into the Treasury, constitutes about one fourth of the entire revenue of the State. All mining operations are conducted under charters, grants, permits, or licenses from the State, and the two systems prevailing are known as "exclusive" and "general" rights. By exclusive right is meant such territory as the State, by legislative enactment, has granted to companies or individuals to be worked exclusively by the grantees. General rights permit holders to work in any streams not controlled by exclusive-right grants. The former are far the most valuable, because they are permanent. The State's royalty from exclusive rights amounted this year to \$125,956 out of \$138,254, and of this sum one company—the Coosaw—paid \$111,071. Since 1870 the State has received from this source \$948,852. In the absence of an accurate survey by competent scientific men, there is a contrariety of opinion as to the extent of the phosphate territory, and how long the material will last. One opinion is that the phosphate underlies 250,000 acres of land, and is practically inexhaustible; and others think that the phosphatic deposits of merchantable quality and accessible position would not exceed 5,000,000 tons. They constitute the most available material now known as a basis for fertilizers. Analysis shows that they contain from 25 to 28 per cent of phosphoric acid, equivalent to 55 or 60 per cent of bone phosphate of lime. The mining companies, of which there are thirty-six, and the individuals engaged in this industry give employment to 2,500 persons, who receive annually at least \$500,000. In addition to this, very large amounts are invested in the manufacture and manipulation of these phosphates by the Charleston fertilizer companies, of which there are twenty, the most prominent being the Etiwan, Ashley, Waudo, Stono, Pacific, Atlantic, Achepoo, and Port Royal Companies, who sold during the year 75,000 tons of fertilizers, or more than double what they sold four years past. The discovery of these deposits has added nearly \$1,000,000 to the receipts of the State Treasury; brought \$18,000,000 into the State, as capital invested in this industry; built up the port of Charleston; furnished freight and business for the railroads, and made an actual cash reduction of 25 per cent in the general tax levy; besides which it has indirectly benefited the entire country, and restored the fertility of thousands on thousands of acres of exhausted land in many other States as well as in South Carolina. Nature, capital, labor, and genius combined to make this wealth—more valuable than gold-beds or diamond-fields—useful and beneficial to the world.

South Carolina ranks as the twentieth in the list of fish-producing States, with 1,005 fishermen, and products valued at \$212,482. Her shrimp-fisheries are more extensive than those of any other State, and nearly as great as those of all other States combined. During the year



the Fish Commission has distributed 166,000 California salmon, 945,000 shad, 4,545 German carp, 58 blue bream, and 50 black bass.

**MANUFACTURES.**—The water-power of South Carolina has been estimated at 3,000,000 horsepower, of which it is said only 15,000 horsepower is now used by all kinds of mills in the State, leaving a very large margin for future development. The cotton-mills in the State contain now 180,701 spindles and 4,120 looms, paid in wages during the year \$728,900 to 4,262 hands, and have a capital of \$4,547,000. This does not include the Pendleton Factory; the Charleston Manufacturing, which began operations at the end of the year; or the Pelzer Mills, which suspended for repairs and enlargement. The stock of all these factories, except five, is above par, and the stock of these five is at par. The Langley stock is quoted at \$173, the Graniteville at \$170, the Piedmont at \$150, the Ready River, Clifton, and Camperdown at \$125, the Farryville and Pelham at \$120, and the Cedar Shoals and Valley Falls at \$110. The dividends paid range from 10 to 20 per cent. The State has wisely supplemented the natural inducements she offers to capitalists in her water-power and her products, by legislation which exempts capital invested in factories from all taxation, except the two-mill school-tax, for ten years. An effort was made at this year's session of the Legislature to repeal this law, but it was overwhelmingly defeated. The same Legislature granted charters to nine new factories, with an aggregate capital of \$1,725,000.

The financial condition of the city of Charleston is much improved, and may now be said to be perfectly sound. At the beginning of this year its debt amounted to \$4,264,050, being \$1,000,000 less than it was ten years ago, and \$500,000 less than it was in 1881. The interest on the debt amounts to \$183,474. In 1870 it amounted to \$314,557. This reduction of principal and interest was not effected by scaling or readjusting, but by paying the principal and by refunding the matured debt in long-date non-taxable bonds bearing a low rate of interest. In 1881 the debt was \$95 for every man, woman, and child in Charleston. Now it is \$85. The Legislature wisely repealed the power heretofore exercised by the city, to borrow money and contract debts; and now the municipal government is absolutely prohibited from contracting any debt in excess of the income of the current year, unless the debt to be incurred shall be approved first by a vote of two thirds of the City Council; second, by two thirds of the voters of Charleston at a special election; and, third, by the General Assembly of the State. The trade of Charleston, for the commercial year ending August 31st, was largely in advance of that of the preceding year. The value of the trade of the year was \$74,839,904, against \$71,211,000 last year. In naval stores the receipts of spirits of turpentine increased from 51,386 casks to 65,000 casks; the receipts of rosin from 281,417 barrels to

256,000 barrels; lumber from 18,610,857 feet to 45,000,000 feet.

The State Legislature was convened in extra session on June 27th for the purpose of dividing the State into seven congressional districts, instead of five, so as to provide for the two additional members of Congress to which the State became entitled under the last apportionment act.

The full text of the redistricting law is as follows:

An Act to divide the State of South Carolina into Seven Congressional Districts.

*SECTION 1. Be it enacted by the Senate and House of Representatives of the State of South Carolina, now met and sitting in General Assembly, and by the authority of the same:*

That the State of South Carolina shall be divided into seven congressional districts, as follows: The First Congressional District to be composed of the county of Charleston, except James Island, Folly Island, Morris Island and the islands lying between them, the lower harbor of Charleston Harbor and the ocean coast-line from and below high-water mark; the towns of Mount Pleasant and Somerville, and so much of the parish of St. James Goosecreek as lies between the western track of the South Carolina Railway and the Ashley River, in the county of Berkeley, and below the county of Colleton; the townships of Bell's, Burns, Carn, Dorchester, George, Givham, Heyward, Koger, Sheridan, and Verdier, in the county of Colleton; the townships of Branchville, Caw-caw, Cowcastle, Edisto, Elizabeth, Goodland, Hebron, Liberty, Middle, Newhope, Union, Willow, Rocky Grove, and Zion, in the county of Orangeburg; and the county of Lexington.

The Second Congressional District to be composed of the county of Hampton; the townships of Broxton's and Warren in the county of Colleton, the county of Barnwell, and the counties of Aiken and Edgefield.

The Third Congressional District to be composed of the counties of Abbeville, Newberry, Anderson, Oconee, and Pickens.

The Fourth Congressional District to be composed of the counties of Greenville and Laurens, the county of Spartanburg, except the townships of White Plains and Limestone Springs; the county of Union, except the townships of Gowdeysville and Draytonville, and the townships of Centre, Columbia, and Upper, in the county of Richland, and the county of Fairfield.

The Fifth Congressional District to be composed of the county of York, the county of Chester, the townships of White Plains and Limestone Springs, in the county of Spartanburg; the townships of Gowdeysville and Draytonville, in the county of Union, and the counties of Lancaster, Chesterfield, and Kershaw.

The Sixth Congressional District to be composed of the county of Clarendon, the townships of Lake, Lee's, Johnson's, and Sumter, and the town of Kingstree, in the county of Williamsburg, and the counties of Darlington, Marlboro', Marion, and Horry.

The Seventh Congressional District to be composed of the counties of Georgetown and Beaufort, the lower township of the county of Richland, the county of Sumter, the townships of Amelia, Goodby's, Lyons, Pine Grove, Poplar, Providence, and Vance's, in the county of Orangeburg; the townships of Anderson, Hope, Indian, Kings (except the town of Kingstree), Laws, Mingo, Penn, Ridge, Sutton's, and Turkey, in the county of Williamsburg; and all of the counties of Charleston and Berkeley, excepting such portion thereof as are hereinbefore designated as a part of the First Congressional District; the townships of Collins, Adam's Run, Glover, Fraser, Lowndes, and Blake, in Colleton County.

SEC. 2. In every case in which, under the provisions of this act, the townships or parts of townships of any county may not all be in the same congressional district, it shall be the duty of the proper board of county canvassers of such county in canvassing the votes of said county to report separately the result of the vote of such township or parts of townships for the congressional district to which they may respectively belong.

SEC. 3. In any case in which a voting precinct may form part of more than one congressional district, if no other provision be made by law, the commissioners of election for the county in which such precinct is situated shall provide for such precinct separate boxes for every congressional district within which the said precinct may be, and each voter at such precinct shall deposit his ballot for member of Congress in the box provided for the congressional district within the limits of which said voter may reside.

SEC. 4. That all acts and parts of acts inconsistent herewith are hereby repealed.

SEC. 5. That this act shall take effect immediately on its approval.

Approved July 5, A. D. 1882.

A statement from the Census-Office gives the following summary of white and colored voters in the new congressional districts:

DISTRICTS.	White.	Colored.	White majority.	Colored majority.
First District.....	12,445	18,884	...	1,439
Second District.....	11,446	16,283	...	4,837
Third District.....	13,359	12,707	652	....
Fourth District.....	17,670	16,985	685	....
Fifth District.....	11,805	12,669	...	864
Sixth District.....	12,480	13,468	...	988
Seventh District.....	7,695	82,598	...	25,198

Acts were passed amending the election law and the law defining the election precincts, and joint resolutions proposing to amend the Constitution relating to the time of holding elections, and relating to the formation of new counties were adopted. The former constitutional amendment proposes that "the general election for Senators and Representatives shall be held in every second year, in such manner, at such time, and at such places as the Legislature may provide"; and the latter, as to new counties, proposes to strike out in section 3, Article II. of the Constitution the words "but no new county shall be hereafter formed of less extent than six hundred and twenty-five square miles, nor shall any existing counties be reduced to a less extent than six hundred and twenty-five square miles," and insert in lieu thereof the following: "Provided that no new county shall be formed which has a population of less than one one-hundred and twenty-fourth part of the whole number of inhabitants of the State, and an area less than four hundred square miles, nor shall any existing counties be reduced to a less area than four hundred square miles." The extra session of the Legislature ended on July 5th. Its total expenses were \$15,409.40.

The Democratic Convention met at Columbia, on August 1st, to nominate candidates for Governor, Lieutenant-Governor, and other State officers. Prior to the meeting it was generally believed that the choice for Governor would be either General Bratton or

General J. D. Kennedy; but after the first ballot, the names of both those gentlemen having been withdrawn, Hugh S. Thompson was nominated by acclamation. He was not a candidate, and was not prominent in party politics. His service to the State for several years had been in the cause of education, having served, with great distinction and success, six years as Superintendent of Education, and it was determined that he should be elected President of the State University, made vacant by the resignation of the Hon. W. Porcher Miles.

The Greenback - Republican - Independent Convention met at Columbia September 5th, and nominated a full ticket for State officers, J. Hendricks McLane being the candidate for Governor.

The combined opposition made strenuous efforts to defeat the Democratic candidates, and much money was spent, but the campaign resulted in the election of the entire Democratic ticket, and of six out of the seven members of Congress. Under a rigid execution of the election laws peace reigned throughout the State on election-day.

The General Assembly met again in regular session at Columbia on November 28th. On December 5th Governor Thompson took the oath of office and delivered his inaugural address. The most important measure of the session was the act to regulate railroads, providing for the appointment of three commissioners; making it unlawful for any railroad company doing business in South Carolina to charge more than "a reasonable compensation for the transportation of passengers or freight of any description"; prohibiting any unjust discrimination in freight or passenger rates; forbidding the charge of greater toll for transportation for a short than is charged for a long distance, and forbidding all rebates or drawbacks, or lesser rates to favored individuals than are charged to the public. An act to amend the usury law was also passed, providing that no greater rate of interest than seven per cent annum shall be charged upon any contracts arising in the State, except on written contracts wherein by express agreement as high a rate as ten per cent may be charged. An act was passed compelling those who are sent to the Lunatic Asylum, and who are able to do so, to pay their own expenses. Another important act was that providing for "the more speedy development of the Columbia Canal," by which \$15,000 and the labor of at least two hundred convicts—equivalent to \$21,900 more—were given for the construction of this work. Another measure of public interest was the act to exempt certain counties in the State from the operations of the general stock law, which requires owners of stock of all kinds to keep them fenced in. As this act requires the counties seeking exemption to pay for the fences which are to separate them from the counties where the law is in force, by a tax



levy on the assessed value of all the stock in those counties, and as the total value of all the stock would not pay the cost of the fences, the law will either be inoperative or it will amount to a confiscation of the property of those who are supposed to need relief from the stock law. The act making appropriations to meet the expenses of the government and pay the interest on the public debt provided for an appropriation of \$765,614.22. After a session of twenty-one working days the Legislature adjourned on December 23d.

SPAIN, a monarchy of Southern Europe. The Constitution of June 30, 1876, vests the legislative powers in the King and the Cortes. The Cortes consist of two Houses, the Senate and the Congress, each possessing the same powers. The Senate is composed of three classes of Senators: Senators by right, to wit, princes of the blood, grandees of Spain, and the chief functionaries of the state, army, and Church; Senators nominated by the crown for life, who, with the Senators in their own right, must not exceed 180 in number; and Senators elected by public corporations and citizens paying the highest rate of taxes, who must not exceed the same maximum number. The Congress, or Chamber of Deputies, is composed of members elected for five years by electoral colleges, in the ratio of one Deputy to every 50,000 inhabitants. The clergy are ineligible. Deputies accepting an office, pension, or decoration, must resign—a regulation which does not apply to Ministers. The Cortes meet annually. The King as well as each Chamber possesses the right of initiative, but financial measures must be first submitted to the Lower House. Ministers are impeachable by the Chamber of Deputies, and triable by the Senate. Each province has its local Assembly. The Roman Catholic is the religion of the state, but all other faiths are tolerated. By the royal decree of August 8, 1878, the Island of Cuba can send deputies to the Cortes in the proportion of one to every 40,000 free inhabitants.

Alfonso XII, the King of Spain, is the son of Queen Isabella and the Infante Francisco. He was born in 1857, and proclaimed king December 31, 1874. The heir-apparent is the Infanta Maria de las Mercedes, born September 11, 1880, the offspring of the King's second marriage, in 1879, with Maria Christina, Archduchess of Austria.

The Ministry is composed of the following members: President of the Council, Pedro Manuel Sagasta, appointed February 8, 1881; Minister of Foreign Affairs, A. Aguilar, Marquis de la Vega de Armijo; Minister of Justice, Alfonso Martinez; Minister of Marine, Admiral F. de Pavia y Pavia; Minister of Finance, Tomaro F. Comacho; Minister of War, General A. Martinez de Campos; Minister of the Interior, Victor Gonzalez; Minister of Commerce and Agriculture, S. L. Albareda; Minister of the Colonies, F. de Leon y Castillo.

AREA AND POPULATION.—The area of the kingdom, including the Balearic and Canary Islands and a small district in Africa opposite Gibraltar, is about 195,000 square miles. The total population of the forty-nine provinces, according to the census of December 31, 1877, was 16,625,860, comprising 8,134,659 males and 8,491,201 females. There were only 26,834 resident foreigners. The increase of population has not been over 75 per cent in the last hundred years. In the seventeen years preceding 1877 it was at the rate of  $\frac{1}{4}$  per cent per annum. The density of population is 90 per square mile, about half that of France. Nearly 46 per cent of the surface is uncultivated.

The following cities contained in 1877 over 50,000 inhabitants: Madrid, 397,690; Barcelona, 249,106; Valencia, 143,856; Seville, 133,938; Malaga, 115,882; Murcia, 91,805; Saragossa, 84,575; Granada, 76,108; Carthage, 75,908; Cadiz, 65,028; Jerez, 64,533; Palma, 58,224; Lora, 52,206; Valladolid, 52,206; Cordova, 49,855.

COMMERCE.—The total amount of the foreign commerce of Spain, for the last three years reported, was as follows, in pesetas, or francs:

YEAR.	Imports.	Exports.
1877.....	533,357,949	515,926,135
1876.....	533,652,237	445,332,544
1875.....	570,297,467	452,021,575

The commercial intercourse with the principal foreign countries is shown in the following table, giving the exports and imports in millions of pesetas, or francs, and tenths of millions, for the last two years reported:

COUNTRIES.	IMPORTS.		EXPORTS.	
	1875.	1876.	1875.	1876.
Great Britain.....	194.7	143.5	156.4	178.8
France.....	149.9	163.6	73.6	90.9
United States.....	60.7	59.7	15.5	12.0
Portugal.....	4.5	4.4	40.1	19.8
Belgium.....	15.6	17.7	5.3	8.8
Sweden and Norway...	17.0	16.0	2.0	3.6
Italy.....	9.2	16.3	3.8	4.5
Algeria.....	6.9	10.3	6.1	8.1

The total imports of 1881 amounted to about 576,000,000 pesetas. The imports of wines and liquors in 1881 were valued at 45,000,000 pesetas; of tropical produce, 45,700,000; animal food products, 29,500,000; total articles of consumption, 130,300,000; the exports of wines and liquors at 268,500,000, of fruits, etc. (oranges, raisins, nuts), 49,400,000; cereals, 24,800,000; total articles of consumption, 359,700,000. The imports of textile materials amounted to 93,800,000 pesetas; wood (cork), 34,200,000, coal 22,900,000, hides and leather 17,200,000, raw metals 16,300,000, total raw materials 187,000,000; the exports of raw metals (lead and copper) to 84,900,000, minerals (pyrites) 76,000,000, total raw materials 180,000,000. The imports of manufactures amounted to 143,000,000 pesetas, in which total tex-

tile manufactures are represented by 60,500,000 pesetas, machines, vessels, etc., by 34,500,000, yarns by 21,700,000, and metallic articles by 12,700,000. The exports of manufactured articles consisted of corks of the value of 14,500,000 pesetas, and playing-cards of the value of 3,100,000 pesetas.

The merchant marine consisted on January 1, 1881, of 2,236 vessels, weighing 560,125 tons, of which 347, of 233,686 tons, were steamers.

There were about 3,875 miles of railroad in operation in 1878.

The length of the state telegraph lines in 1880 was 10,075 miles. The number of dispatches in 1880 was 2,222,429, of which 1,397,451 were domestic, 508,417 international, and 316,561 official. The receipts were about \$800,000, the expenses \$1,190,000.

The number of post-offices in 1880 was 2,586; number of letters carried 81,422,000, postal cards 1,045,000, circulars, etc., 5,703,000, newspapers 40,247,000; total, 128,417,000. The receipts were 9,407,954 francs, expenses 7,599,820 francs.

**COLONIES.**—The area of the colonies of Spain and their population in 1877 were as follow:

COLONIES.	Square miles.	Population.
Cuba .....	43,220	1,394,516
Porto Rico .....	3,550	646,862
Total, America .....	46,770	2,040,378
Philippine Islands .....	65,100	4,319,269
Caroline Islands and Palaoa .....	905	28,000
Marian Islands .....	420	5,610
Total, Asia .....	66,425	4,352,879
Fernando Po and Annobon .....	483	5,590
Total colonies .....	113,678	6,399,347

The population of Cuba consisted of 764,164 whites, 344,050 free negroes, 227,902 slaves, and 58,400 Chinese. The number of slaves decreased by 136,000 between 1870 and 1877. A bill for the abolition of slavery in Porto Rico was passed in 1873. The bill for the gradual extinction of slavery in Cuba, introduced in the Cortes in November, 1879, provides that all slaves over fifty-five years old should become free forthwith; that slaves from fifty to fifty-five years old should be liberated September 17, 1880; from forty-five to fifty, in September, 1882; from forty to forty-five, in 1884; from thirty-five to forty, in 1886; from thirty to thirty-five, in 1888; and all the rest in 1890. After 1880 the sum of 100,000 piasters is annually reserved in the Cuban budget to pay an indemnity of 350 piasters for each slave emancipated. The population of Cuba in 1879 was 1,424,649; of Porto Rico in 1880, 754,313. The population of Havana in 1873 was about 230,000; of the city of Porto Rico, in 1860, 18,132; of Manila, 270,000.

The exports of Cuba amounted to \$76,235,726 in 1876, \$66,836,204 in 1877, and \$70,881,525 in 1878. The chief article of export is sugar, from 90 to 91½ per cent of which is sent

to the United States. The quantity exported in 1879 was 1,698,392,000 pounds, as compared with 1,265,195,000 pounds in 1878, 1,242,793,000 in 1877, 1,487,808,000 in 1876, 1,864,991,000 in 1875, and 1,925,400,000 in 1870. Besides sugar there were exported from Havana in 1880 9,873 pipes of rum, 12,433 barrels of molasses, considerable quantities of honey and wax, a small quantity of coffee, 12,464,936 pounds of tobacco, and 153,141 thousands of cigars. The number of vessels arriving at the port of Havana in 1880 was 1,426, of 1,020,181 tons, against 1,752, of 1,103,439 tons, in 1879, and 1,626, of 979,946 tons, in 1878. Of the arrivals in 1880, 663, of 493,550 tons, were American ships; 491, of 291,481 tons, Spanish; 151, of 120,130 tons, English; 33, of 56,389 tons, French; and the rest principally German and Norwegian. There were about 860 miles of railroads in operation on the Island of Cuba in 1880, and 2,800 miles of telegraph lines.

The expenditures of Porto Rico are estimated for the year 1879-'80 at \$3,506,500. The value of the merchandise exported in 1878 was \$10,422,400. There were exported 1,659,519 quintals of sugar, 4,922,707 gallons of molasses, 171,885 quintals of coffee, 51,346 quintals of tobacco, 150 quintals of cotton, 6,477 quintals of hides, and 38,247 gallons of rum.

The value of the exports from the Philippine Islands in 1879 was 18,813,452 pesos; of the imports, 18,031,547 pesos. Sugar constitutes over 56 per cent of the exports, of which product 2,145,423 pecculs, of 135 pounds, were exported in 1879.

**ARMY.**—The Spanish army is becoming reorganized on a plan submitted to the Cortes by the King. By the law of January 8, 1882, the period of service is fixed for all arms at twelve years: three in the active army, three in the active reserve, and six in the second reserve. The period in the colonial army is eight years, four with the colors and four in the second reserve. The peninsular army is recruited by conscription and enlistment, the colonial wholly by enlistment among the men under thirty-five years of age who have served their time in the active army. Immunity from service is purchasable for 1,500 francs. Every Spaniard is otherwise obliged to enter the service. The number of reserve battalions and of depots will range from 104 to 140, corresponding to the number of battalions of the line. Each depot district has a reserve battalion formed and an active depot battalion partly filled, which receives the recruits and transfers the number needed to complete the corresponding line battalion, and which will call in the men on leave in civil employments and the active reserve in case of mobilization, and after furnishing the complement of the line and the first reserve complete itself, if necessary, to make up the second reserve army. The cavalry and artillery receive the same territorial system of



organization. By these measures an army of 400,000 instructed and easily mobilized troops is expected to develop. The effective of the standing army for 1882-'83 is fixed by the decree of July 3, 1882, at 94,810 men, with 28,000 additional during the three months of instruction. The provincial militia has been dissolved.

The effective strength of the army in Cuba was fixed at 26,579 men; of the force in Porto Rico at 3,318; of that of the Philippines at 10,035.

The civic guard, or police troops, numbered 780 officers and 14,756 men in 1882; the carbiners, or custom-house guard, on the coasts and frontiers, consisted of 92 companies and 22 mounted sections.

(For details of the Spanish navy, see NAVIES OF EUROPE.)

**FINANCES.**—The sources of revenue and heads of expenditure are set down in the budget approved for the year ending June 30, 1883, as follow, in pesetas (one peseta = one franc):

RECEIPTS.	Pesetas.
Direct taxes.....	280,979,000
Indirect taxes.....	164,409,000
Customs.....	115,458,000
Stamps and <i>regie</i> receipts.....	221,585,000
Receipts from state property.....	28,860,225
Miscellaneous.....	21,706,000
<b>Total.....</b>	<b>782,997,225</b>

LOANS.	Nominal capital.	Interest.
Consolidated debt due the United States, 5 per cent.....	8,000,000	150,000
Consolidated debt transferred to Danish Government, 3 per cent.....	8,250,000	97,500
Foreign perpetual rentes, 1 per cent.....	4,092,894,000	40,928,940
Domestic perpetual rentes, 1 per cent.....	8,245,160,194	82,451,602
Bonds in favor of civil corporations, 1 per cent.....	599,373,783	5,993,737
Bonds in favor of the clergy, 1 per cent.....	858,300,102	.....
Public-highway bonds, 2 per cent.....	10,754,000	215,080
Public-works bonds, 2 per cent.....	10,524,000	216,480
Railway subsidy bonds, 2 per cent.....	614,400,000	12,288,180
Debt for materials.....	170,326	1,703
Salary arrears.....	9,567,895	.....
Redeemable foreign loans.....	254,402,000	5,088,040
Redeemable domestic loans.....	471,647,821	9,432,956
<b>Total.....</b>	<b>9,618,759,121</b>	<b>106,264,218</b>

**FOREIGN RELATIONS.**—The progress of Spain in orderly government and prosperity, and the projected reforms in the army and navy, impel her to lift her head somewhat higher in international affairs. Expansive desires are manifested in the direction of Morocco, and greater bitterness is felt at the possession of Gibraltar by Great Britain. Several occasions of jealousy and misunderstanding occurred with England during 1882, while the relations with other powers were confined to questions of the terms on which the commercial treaties are to be renewed. The occupation of the northern end of Borneo, by a company under an English charter, led to a protest, on the ground that Spain had sovereign rights over the territory, dating from 1521, and acknowledged by the Sultan of Sooloo (see BORNEO). The denial of this position by the British Government caused dissatisfaction, which grew more intense upon England's action in the Egyptian question. The Spanish Cabinet asked

EXPENDITURES.	Pesetas.
Civil list.....	9,800,000
Legislation.....	1,869,250
Public debt.....	223,032,050
Indemnities and pensions.....	47,750,065
Presidency of the Council.....	1,101,600
Ministry of Foreign Affairs.....	9,580,900
“ Justice.....	51,625,675
“ War.....	126,272,700
“ Marine.....	86,127,800
“ the Interior.....	45,369,000
“ Public Works.....	90,117,400
“ Finance.....	20,531,925
Direction of state monopolies.....	124,957,875
Administration of mortmain.....	522,510
<b>Total.....</b>	<b>782,680,250</b>

The burden of the public debt was such that in 1871 the Minister of Finance declared that the kingdom was on the verge of bankruptcy. After that occurred the heavy military expenses of the civil war. The army expenditure has been less since 1878, but deficits have occurred regularly. The present Minister promised in 1881 a reform in the finances which would secure a surplus in the future. The capital of the public debt, consisting of the consolidated debt due the United States; do., transferred to the Danish Government; foreign and domestic perpetual *rentes*; bonds in favor of civil corporations and of the clergy; public improvement bonds and foreign and domestic loans, on September 1, 1881, and the interest charge of the year, were as follow, in pesetas:

leave to take part in the conference at Constantinople. All the powers gave a favorable reply except France, which avoided a direct answer, and England, which returned a positive refusal.

A difficulty arose with reference to some Cuban patriots, which placed England in the position of a suppliant. Maceo, Rodriguez, and another political prisoner, while being transferred to a penal colony, escaped from custody and took refuge in Gibraltar. The Spanish consul, being apprised by the police, informed the English authorities that these men were fugitives from justice, and requested that in order to save trouble and delay they should be expelled at a certain hour so that the police might capture them on Spanish soil. This was done by the compliant officials, who thought nothing more about it until a storm of indignation arose in England at the violation of the right of asylum. The British Government made earnest representations, which

the Spanish Minister answered with the same sort of arguments which he had been accustomed to receive from London; but when it was put in the light of a favor, the Spanish authorities finally released two of the prisoners.

A projected pilgrimage to Rome caused solicitude in the early part of the year. It was feared that it might develop into a Carlist demonstration, or into one in favor of the restoration of the temporal power of the Pope, which would cause complications with the Italian Government. Correspondence on the subject was carried on with the Quirinal and with the Vatican. The attitude of the Archbishop of Toledo, Cardinal Moreno, and of the Papal Nuncio, increased the distrust. Yet the development of the affair revealed the fact that the clergy of Spain were not disposed to identify themselves with the failing cause of Don Carlos, but rather to put their trust in the Conservative-Liberal party. The Clerical representatives in the Cortes assumed an aggressive attitude toward the Sagasta government, not only in regard to the proposed civil marriage and education laws, but on the question of the treatment by the Cabinet of the question of the temporal sovereignty of the Pope in its relations with the Italian Government.

LEGISLATION.—The projects of Comacho for the reform of the finances were approved by the Cortes before they adjourned, on December 30, 1881. The Finance Minister proposed a 4 per cent loan of 1,800,000,000 pesetas, to cover the privileged 6 per cent debt and the floating debt, and asked discretionary power to effect an arrangement with the Spanish and foreign holders for the conversion of the consolidated debt. The provisional understanding arrived at in 1876 secured to the creditors 1 per cent interest to January 1, 1882, and after that date  $1\frac{1}{2}$  per cent. Comacho's project was to convert the loans into 4 per cent bonds, scaling down the capital so as to secure the creditors 1.62½ or 1.65 per cent instead of 1.25 per cent interest on the face value of the existing bonds. He negotiated at once with the domestic creditors, and came to terms in the beginning of February on a smaller reduction. The compromise secures the bondholders  $1\frac{1}{2}$  per cent per annum on the old bonds converted into 4 per cent new bonds, but the arrangement does not go into effect until July 1, 1883. The French and Dutch bondholders agreed to the same terms, but the English refused to accept the commutation. In the interval they receive  $1\frac{1}{2}$  per cent. The foreign creditors were treated with on the same basis. This arrangement adds 43,000,000 pesetas to the annual burden of taxation. The augmentation of the army and navy, on which the King and his Government were determined, increases the amount of extra taxation to sixty or seventy millions. Comacho met with difficulties on every side in attempting to carry out his comprehensive schemes for obtaining the necessary increase in the revenue.

The main feature in the new financial policy was the reform of the tariff in the direction of free trade, which had been impending since Sagasta came into power, and was now to be applied in a sweeping manner in the new commercial treaty with France. The people of Catalonia are an excitable race, thoroughly imbued with federalistic sentiments. The tumultuous populace of Barcelona, and the other factory towns, were already embittered by the octroi regulations. The manufacturers, to provoke disturbances and coerce the Government to preserve their monopoly of the domestic woolen and cotton goods market, suddenly closed their workshops. The Conservatives, who always supported protectionist doctrines, encouraged the belief that the French treaty would take the bread out of the mouths of the working-people. The Socialists, who can muster an army of adherents among the operatives of Catalonia, and who in Spain combine the national tendency to revolutionary methods with the violent doctrines of anarchism, joined the cry, in the hope of turning the movement in a social-revolutionary direction. These various incitements produced symptoms of an insurrection in May. Mobs congregated in the streets and squares of Barcelona. They destroyed the octroi offices, and ordered stores and workshops to be closed where the proprietors had not followed the general example. Bands marched through the country, proclaiming the independence of Catalonia. The Government was prepared for the outbreak. The military force in the province was strongly reinforced. Captain-General Blanco was energetic and active. The insurgents were met by troops wherever they appeared. In two weeks order was restored, and the proclamation of martial law recalled.

The Liberal-Conservative opposition took a strong stand against the financial policy of the Ministry, so as to be ready to resume the reins of government if the Constitutional-Liberal Ministers failed in their difficult task. Orovio, Cos-Gayons, and the other former Finance Ministers, opposed the composition of the creditors, on the ground that the country could not stand the additional burden. They hoped that the popular discontent over the new taxes would impel the King to dismiss the Cabinet and recall his Conservative advisers. The Ministers, who had yielded somewhat in the matter of the taxes, insisted on carrying the French treaty without alteration. The Cortes reassembled on March 20th. The Conservatives, re-enforced by the Catalanian representatives, when the French treaty came up in the Cortes, tried to have it made terminable on one year's notice; but it was passed, by a four-fifths majority, in the Cortes, and went into force for the period of ten years, on May 15th. The arrangement for the conversion of the consolidated debt was ratified. The Government made important concessions to the protectionists in the final framing of the general tariff law,



which was passed shortly before the close of the session, on July 7th. This law provides for the gradual reduction of all duties to 15 per cent as against countries allowing equal advantages in their commercial treaties with Spain, but allows retaliatory duties to be imposed when another country raises its duties on Spanish products. All duties between 15 and 20 per cent will be reduced to 15 per cent. The excess over 15 per cent of duties above 20 per cent is divided into three parts, one part to be remitted immediately, one after the lapse of five, and one after ten years. The reductions are made discretionary with the Government. The Ministry were deterred by the protectionists from acceding to the demand of the representatives of the Antilles to have the privileges secured by the oppressive, antiquated colonial system to the flag and products of the mother-country abolished. The postponement of this reform stands in the way of the conclusion of a reciprocity treaty with the United States, which is earnestly desired by the inhabitants of Cuba and Porto Rico. The advantages in Cuba, which the shipping and the grain-growing and other agricultural interests in Spain adhere to, deter the American Congress from abating the sugar duties. The question of the wine duty in England prevents the conclusion of a satisfactory commercial treaty with Great Britain. Mr. Gladstone, who, for politico-commercial reasons, enforced by moral and sanitary arguments, secured a reduction of duty on the light wines of France, for fiscal reasons is unable to place wines of greater alcoholic strength on the same footing. The concessions which Comacho was obliged to make in the trade taxes, the octrois, and also in the patent duties, lessened the prospects for escaping the annual deficits while adding greatly to the expenditures. The reduction of the tariff is calculated to increase the revenue, by increasing imports and diminishing smuggling; but the slower the reform, the less the Treasury is benefited. After the important step taken in the French treaty the Government halted in its course, allowing the treaties with Italy, Germany, the Netherlands, Portugal, Sweden and Norway, Denmark, Greece, Russia, Turkey, and Switzerland to expire, and their commerce to come under the provisions of the general tariff, except in the case of Germany, and one or two other countries, where the treaty was prolonged until December 15th. The difficulty of the fiscal situation was enhanced by bad harvests in Andalusia and other parts of Spain. While commanding the confidence of the King in their financial policy, and thus able to resist the assaults of the Conservatives, an opposition was organized which threatens to unseat the Ministers.

**STAR-ROUTE TRIAL.** The proceedings instituted against various persons charged with fraud in the conduct of the mail service of the United States on the "Star Routes"—or lines upon which the mail can not be carried by

railroad or steamboat—were continued during the year. (For their inception, see "Annual Cyclopædia" for 1881, article UNITED STATES.) Early in January, several persons were arrested and subsequently indicted for furnishing fraudulent bonds to accompany bids for mail service, or for becoming surety on such bonds, without possessing the necessary qualifications. In February, evidence in the case of what was known as the Dorsey combination was laid before the Grand Jury of the District of Columbia by Mr. George Bliss, acting as special counsel for the Government. The alleged combination consisted of John W. Dorsey, John M. Peck, and John R. Miner, who had originally made the bids and obtained the contracts; Harvey M. Vaile, to whom, as a sub-contractor, the routes were afterward transferred; Stephen W. Dorsey, who was accused of having directed the course of the contractors, and aided them with his influence as a Senator; M. C. Rerdell, S. W. Dorsey's secretary, who was said to have been a supervising agent and manager for the combination in Washington; Thomas J. Brady, Second Assistant Postmaster-General, who had official direction and control of the star-route service; and W. H. Turner, who was a clerk in the contract office, with control of the territorial routes under Brady. Mr. J. L. Sanderson, a contractor, was also included in this first indictment. The combination had originally 134 routes, upon which the compensation for service under the contracts amounted to \$143,169. This was raised, by "increase and expedition"—that is, by increasing the number of trips to be made per week, shortening the time for each trip, and making allowances therefor—to \$622,808. On twenty-six of the routes the increase of pay had been from \$65,216 to \$530,319. Upward of eighty witnesses were examined before the Grand Jury, and a presentment was made against the accused persons on the 20th of February. Mr. W. W. Ker, of Philadelphia, was engaged by the Attorney-General to draft the indictment and otherwise assist in the prosecution of the case. The formal indictment was agreed to and brought into the Criminal Court of the District of Columbia, before Judge Wylie, on the 4th of March. It was a voluminous document, and set forth the relations of the several parties to the mail service, and the facts in regard to the management of the routes, and alleged fraud in securing increase of compensation, and conspiracy to defraud the Government on the part of the defendants. On the 9th of March, and two days following, most of the indicted persons appeared before the Court and gave bail for their appearance at the trial. The case came up for the arraignment on the 16th, but was postponed until the 25th. Motion was then made by the defense to quash the indictment, and after some argument a further postponement was had. On the 29th of March Mr. R. T. Merrick, of Washington, consented, at the request of the Attorney-General, to as-

sist in the prosecution of the case as Government counsel. Argument was begun on the motion to quash the indictment on the 31st of March, the Government being represented by District Attorney Corkhill, Mr. Bliss, Mr. Ker, and Mr. Merrick, and the defense by Messrs. Ingersoll, Totten, Wilson, Shellabarger, Chandler, and others, and five hours were allowed to each side. The chief grounds on which it was claimed that the indictment should be quashed was that the defendants had not been bound over by a commission to await the action of the Grand Jury, and that the jury had found the indictments without having the cases properly brought before them by order of the Court. The motion was denied on the 10th of April, and the Court held that the indictment was good and sufficient. The defendants being then called upon to plead, Mr. Totten stated that he wished to file a plea in abatement on behalf of Brady and Turner, on the ground that persons other than the District Attorney had free access to the Grand Jury when the indictment was under consideration, and the jury was improperly influenced. On the following day, April 11th, after hearing argument, the Court ruled that the proceedings of the Grand Jury room could not be inquired into. In closing his decision, Judge Wylie said: "The plea must be entered, or, if the defendants stand mute, the trial will proceed under the terms of the law. The only objection, that some of the parties have been indicted under their initials instead of their full Christian names, is of no consequence now, and it can form the basis of a plea in abatement hereafter. My opinion is that the Grand Jury acted improperly, but that does not affect the indictment; and I therefore decide that this plea in abatement is not allowable, and that the Court ought not to receive it." Some of the defendants refused to plead, but pleas of "Not guilty" were entered for all except S. W. Dorsey, who had failed to appear. His recognizance had been declared forfeit, and a warrant issued for his arrest. On the 19th of April he appeared in court and pleaded "Not guilty," and the order for forfeiture of his bail was set aside.

A motion on behalf of the defendants for a bill of particulars was denied on the 20th of April. Judge Wylie said it was not necessary that an overt act should plainly appear in the indictment, if the existence of the conspiracy was established. It was, however, necessary to prove that one or more of the accused had committed acts in furtherance of the conspiracy. He thought the indictment was faulty in not describing the alleged forged papers with sufficient fullness, but the question was whether there was not enough other evidence set forth to fulfill the requirements of the law. Redundancy in an indictment was not a fault, and if there was enough evidence of the commission of overt acts to secure the conviction of one of the alleged conspirators without the

admission of these papers, the indictment was good. On the 22d, the motion to quash the indictment as to Rerdell, on the ground that he had been indicted under his initials as M. C. Rerdell, instead of his full name as Montfort C. Rerdell, was granted. The Court held that all authorities were agreed, that when an indictment designated a man by initials only, without explanation, it was defective. If it had declared that the name was unknown, or that the person was ordinarily known by certain initials or abbreviations, it would have been sufficient. Rerdell was rearrested and brought before the police court on the 24th. On the preliminary trial there, which began on the 26th, ex-Attorney-General McVeagh and ex-Postmaster-General James testified that Rerdell had made a statement or confession to them, in which he said that he had been the manager for the Star Route combination in behalf of S. W. Dorsey. No bids had been made in Dorsey's name because he was then a senator, but when he left the Senate a division of the routes was made. Rerdell said that he had kept a set of books which showed that certain payments had been entered under the names of Smith and Jones, which names represented Brady and Turner. Mr. James said that Rerdell had told him that Brady received either 33 $\frac{1}{3}$  or 40 per cent of the extra compensation when increase or expedition was granted, and that one half the fines remitted had to be paid to him. Rerdell was further said to have declared that when the congressional investigation was made, and a call for the books was anticipated, a complete new set had been made by him to prevent the discovery of these payments. It was said that Dorsey regained his influence over Rerdell, and induced him to retract the so-called confession.

The time set for the trial was May 4th, but on that day further motions to quash the indictment were made in behalf of Brady and Turner, on the ground that they held official positions and acted on their discretion, and that they were improperly joined with the others. Judge Wylie held that a conspiracy was a single crime, and that all engaged in it were on the same footing without regard to the official relations of some of them. J. W. Dorsey was not in court, and his counsel was somewhat warmly accused of violating a pledge to secure his presence whenever the trial was to take place. In consequence of his absence an adjournment was taken to the 16th, when he appeared, and gave bail. At that time counsel for the Government announced that they had concluded, instead of having Rerdell reindicted separately, to get a new indictment against all the alleged conspirators; otherwise they might be compelled to have two trials, going over practically the same ground. On account of this determination there was a further postponement until May 25th, to await the action of the Grand Jury. The trial of Rerdell in the police court was also suspended.



On the 20th, the new indictment was presented. The name of Sanderson was omitted, the date of the conspiracy was changed, new allegations of overt acts were introduced, and other supposed defects of the old indictment were remedied. Efforts were made on the part of the defense to have the new indictment quashed on much the same grounds as those on which the former one had been attacked, but it was sustained, and the trial peremptorily set down for June 1st. In rendering his decision, Judge Wylie said:

This was the third, or perhaps the fourth, time he had been called upon to pass upon the sufficiency of this indictment, or the other, which was substantially the same. The indictment seemed to be very explicit. It detailed the duties of the officers of the Post-Office Department. Twenty-two contracts were specified in it as forming a basis for action against the defendants. It charged that the second assistant postmaster-general, the chief clerk, Turner, and the contractors had entered into a conspiracy to defraud the Government. It was a conspiracy of the most aggravated description. The date alleged was May 27, 1879. The means—the false papers—were alleged; the object—to obtain money illegally from the Treasury—was set forth. The present law required the conspiracy to be accompanied by the commission of overt acts. There were 36 such overt acts set forth in the indictment. After a critical test, only one or two had been found insufficiently defined. He did not know that the Government would ever be able to make out a conspiracy, but he was bound by the facts presented. He took it that every word in the indictment was true. He could not, from his own knowledge, say the amounts paid were not excessive, but was bound to accept the averment contained in the indictment to that effect. As far as the forged papers were concerned, in his opinion any paper calculated to impose upon and influence improperly the postmaster-general was illegal. The defense said they had a right to know under what statute they were being proceeded against. "They have that right," said Judge Wylie, and he proceeded to read section 5,440, Revised Statutes. "There are several other statutes that would apply. Any one of them would answer." Turner, perhaps, did not make as conspicuous a figure as some others in the conspiracy, but in his position he was a necessity to the success of the conspiracy. This fact, and the additional one that no overt acts were alleged against him, had been made the basis of his counsel's argument. But he may have been as guilty as any in the conspiracy, and for the present he would hold that Turner had been amply connected with the conspiracy. Although not present at all, one may be bound by the acts of a fellow-conspirator where the conspiracy is concerned. "God knows," said Judge Wylie, "it would be a horrible state of society if a criminal could escape when brought before a court by denouncing the law."

On the 1st of June, the day set for the trial, there was a panel of twenty-six petit jurors in attendance, and during their preliminary examination the question was raised as to the number of peremptory challenges to which each side was entitled. It was contended, on the part of the prosecution, that each side was entitled to three challenges, and no more; while counsel for the defense claimed that the Government was entitled to none at all, while each of the defendants was entitled to four. A conflict between the General Statutes of the United States and those relating to the

District of Columbia in this respect gave rise to elaborate arguments on this point, and the Court finally decided that the Government should have three challenges, and each of the defendants four. In the process of obtaining a jury the prosecution had exhausted its right of challenge when five men were placed in the box, while the defense had used only fourteen of its twenty-eight challenges when the jury was complete. The panel was exhausted, and four talesmen were called by the marshal; but there was no delay in obtaining a jury. It was made up as follows: Foreman, William Dickson, real estate and claim agent; Matthew McNelly, shoe-dealer; John B. McCarthy, printer; Edwin J. McLain, lawyer; William K. Brown, teacher; Edwin D. Doniphan, shoe-maker; Henry A. Olcott, livery-stable clerk; William Holmead, grocer; Thomas Martin, barber; George W. Cox, dealer in gentlemen's furnishing goods; Hugh T. Murray, clerk; Zachariah Tobriner, broker. Of these, Brown and Martin were colored. In asking the judge to warn the jury against talking with other persons about the case or reading the comments of the newspapers, Mr. Merriek, in behalf of the Government, reminded the Court that certain journals in the interest of the accused were wont to abuse everybody connected with the prosecution, and had even attacked the judge himself. "After this case has been tried," said Judge Wylie, "I will direct the attention of the Grand Jury to these publications." This remark led Colonel Totten to rise and declare that when the newspaper business should be ventilated, the defense would be on hand and pay attention to the papers all over the country which had vilified their clients and manufactured public opinion against them.

The opening of the case on the part of the Government was made by Mr. George Bliss, who began his address on the 2d of June and completed it on the 5th. He went over the allegations of the indictment with regard to the nineteen routes, and made explanations tending to show conspiracy and fraud, and promised to substantiate these by evidence. The opening for the defense was made by Judge Jeremiah Wilson, one of the three lawyers directly representing Brady and Turner, and Judge McSweeney, of Ohio, who was of counsel for the Dorseys. This occupied the 6th, 7th, and 8th, though on the latter day a beginning was made in the taking of testimony. On the same day the judge took occasion to remark upon certain references which had been made in the newspapers to the jury, especially as to the manner of selecting the last two jurors from talesmen called by the marshal. After speaking of the facts, Judge Wylie said:

I have seen so much injustice done to jurors and to litigants, and to courts who are engaged in the administration of justice, that I feel called upon in this case to declare that these charges, in my opinion, are without foundation. These flying rumors are calculated to do great harm. There is a law which subjects par-



ties to prosecution for libel in consequence of articles published, the effect of which is to obstruct the administration of justice, and I do think it will be the duty of the District Attorney to call the attention of the Grand Jury to some of these newspapers, and see if we can't have justice administered fairly, according to law, without having jurors disparaged and misrepresented on mere conjecture or fancy; and I trust that the jurors in this case will see the propriety of guarding their own conduct while the cause is pending, so as not to subject themselves to good grounds of suspicion, or even to the appearance of improper conduct. I will only lose faith in the jury when driven to by something more than newspaper articles. Gentlemen of the jury, your position is one of much delicacy. Don't allow any person to approach you or to suggest their own views, or make any intimation whatever, whether they are connected with the trial of this cause or appear to be unconnected with it. You don't know what motives may influence suggestions from persons outside. Keep your own counsel, follow your own judgment and conscience. Keep yourselves uncontaminated by the world outside.

An attempt was made, on the 9th, to introduce the evidence regarding the statement or "confession" of Rerdell, which had in substance been given in the police court by ex-Attorney-General McVeagh, ex-Postmaster-General James, and Inspector Woodward. This was objected to, and after a controversy between counsel it was barred out as incompetent until the existence of a conspiracy should be shown by other evidence. The Court said that conspiracy was a crime which required more than one participant. The rule of evidence was, that no one person's confession could be used to convict another. The other rule was, that, before binding one conspirator by the statements of another, there must be an agency shown. In this matter the conspiracy was the offense. In murder it is the death, and if a man should confess to having murdered another, it would not bind him. It must be first shown that the man was dead, or that there was a reasonable probability of his death. He was of opinion that the evidence was not admissible at this stage. As to the assertion of the prosecution, that the jury must determine when the evidence was sufficient to prove the existence of the conspiracy, it was, he believed, wrong in principle, and in his opinion the matter is entirely within the judgment of the Court. When he was satisfied from the evidence of the existence of a conspiracy, he would allow this testimony to be introduced. After reading several authorities, Judge Wylie concluded by saying that a person could only convict himself by a confession, and could not even do that until the crime was first made out.

As the trial proceeded, it was evident, from the efforts of the counsel for the defense to exclude testimony, that it was their purpose to confine and restrict the admission of evidence as closely as possible. Very many of their objections were overruled, and exceptions were noted. The evidence related to the methods of the Contract Bureau, to the facts concerning the routes, the methods of service, its requirements, etc., in great detail. In overruling the objections of the defense to the evidence of

some of the drivers and sub-contractors, which was intended to show the fraudulent character of the petitions and affidavits of contractors, the Court said:

Now, the Government in this case has undertaken a mighty task. It has combined some seven or eight defendants in one conspiracy, and it has charged that the subjects of the conspiracy were nineteen different contracts and sub-contracts, and it has undertaken to make out its case against all these defendants under this combination of contracts and sub-contracts, and under charges specially setting forth the overt acts done by the conspirators and through the medium of the Post-Office Department and the Treasury Department, and it is a scheme of the most comprehensive character, and one which it is called to establish. That is all. But the Court, in looking at the offer of evidence in any particular case, must regard the evidence in relation to the comprehensiveness of this indictment and of the scheme of the prosecution. It is necessary that there should be a conspiracy. If the conspiracy be established, as charged in this indictment, then it comprehends all these nineteen or twenty different contracts and the service under those contracts. From the relation of the conspiracy those contracts become blended. They are put into the concern as constituting one capital. The law in regard to the overt act, in pursuance of the conspiracy, requires one overt act. And one overt act by any one of the conspirators is enough for the purpose of the prosecution. The conspiracy must be made out. A conspiracy is different from a combination in this, that the conspiracy must have a corrupt character. A combination or a partnership is lawful. If all these parties had entered into a combination, each one to put in his contract or his sub-contract as his contribution to the common capital, with a view of dividing the profits, that would have been perfectly lawful. There would be nothing wrong in that, either morally or in the eye of the law. That would not, of course, be the subject of a criminal prosecution. It was necessary, therefore, not only that there should be a combination, but that there should be an evil combination—that is, a conspiracy with an evil purpose. It is not required that the indictment, in charging the evil purpose, shall set out the specific act to be proved. It is necessary that the indictment shall contain some averment to change the lawful combination into an unlawful conspiracy, and that is done when the indictment charges the combination first, and then charges that it was done for the purpose of committing a fraud upon the Government by means of false petitions, false papers, false affidavits, and so on. . . . In my view the conspiracy has not yet been made out. We are going along in that direction, but with what success for the Government, or with what failure for the Government, the future alone will be able to disclose. For the present, regarding the evidence as respects this route as tending to show that there was a fraud on the part of one of these defendants alleged to be a member of the conspiracy, that there was a fraud contemplated by him in his conduct of that route, for which he was the contractor, and in contemplation of the future progress of this cause, in which the Government will be required to show that this fraud was put in as a part of the common capital stock of this concern, I shall allow the evidence to go in.

Objection to testimony regarding the details of service on different routes was subsequently strongly urged. It was contended that the inquiry could not go beyond the papers and alleged fraudulent petitions on which the second assistant postmaster-general had granted his orders. The judge, in overruling the objection, said: "A conspiracy may be made out by many minute circumstances. If they are numerous enough and significant enough they may amount



to proof." The indictment had charged, he continued, that the object of the conspiracy had been to get through General Brady, by many means, money not earned. The petitions might all be genuine, but they were only a part of the means, and the Government could support the charge by other evidence in accordance with the provisions of the indictment. This decision let in the testimony of mail-carriers and others on the routes. In ruling out the records of the Inspection Division in regard to fines on the 27th of June, Judge Wylie remarked that he had seen in this case a great many petitions from men of the highest standing in the country, asking for increase or expedition on these routes. On the face of these papers he could not see anything calling for the condemnation of Brady because he had complied with the petitions. Brady was not expected to go over the routes, but must act on the petitions. "You have not," he said, "brought home to him any facts showing that, in ordering expedition, he acted from improper motives, for he is backed by these petitions, and the recommendations of men of high standing acquainted with the country and its development. If I can see anything in the evidence to bring home to him a reasonably strong suspicion of improper motives, I will not hesitate to go into this further; but no evidence of this kind has been offered, and the contracts seem to be sustained by the petitions, which justify him. Am I to allow the time of the Court to be taken up with an investigation of fines and remissions? I shall exclude this evidence at present." Afterward he declared that the Government had impeached Brady in the indictment and by speeches, but not by evidence thus far. In reply to Mr. Merrick's suggestion about protests from postmasters and others, the judge said: "If a postmaster complains or protests to the department after an order has been made, is the second assistant to trust him against all the petitions and recommendations on which he acted, and break up the arrangement on that account?"

An episode which attracted some attention occurred early in July. The Grand Jury had been previously dismissed until October, but on the 7th of July an order was signed directing it to reconvene on the following Monday. This action was taken in consequence of the following request from District Attorney Corkhill: "In view of exigencies which have arisen, I have to request that an order be issued directing the grand jurors to convene at as early a day next week as possible. This request is made because of information received from Messrs. Bliss, Merrick, and Ker, representing the Government as special counsel, that matters have recently come to their knowledge which require the organization of the Grand Jury at an early day, in order to prevent certain prosecutions, which it is their duty to institute, from being barred out by the Statute of Limitations. I am led to believe that the

matter referred to will not occupy the attention of the Grand Jury more than a couple of days."

The purpose of calling together the Grand Jury was to lay before it evidence regarding the San Antonio & Corpus Christi route in Texas, upon which J. B. Price was the contractor. This evidence was to be given chiefly by John A. Walsh, formerly a banker in Washington, and was expected to implicate Senator Kellogg, of Louisiana, in the alleged frauds. The Grand Jury received the instruction of the Court on the 12th of July, and proceeded to listen to the proffered testimony. Shortly after retiring they reappeared, and inquired if the jury had discretionary powers as to allowing the prosecuting officer of the Government to be present. The judge replied that the jury could not exclude him; he had a right to be present, if he desired, while witnesses were under examination, but not when the members of the jury consulted among themselves. The foreman asked if the prosecuting officer had a right to be present during the entire time of the examination, and received an affirmative answer. On the following day the Grand Jury reported that they found no ground for any new indictment, and were dismissed. Mr. Walsh thereupon caused to be published the substance of his testimony, and claimed that the Grand Jury had been improperly influenced to ignore the charges laid before them. On the 17th of July, Senator Kellogg published the following explanation:

With reference to the interviews published in two New York journals this morning, in which John A. Walsh attempts to connect me with the Star Route cases, I have only this to say: The Grand Jury of the District of Columbia, composed of twenty-three of the best citizens of Washington (the majority of whom are opposed to me politically), last week carefully and thoroughly examined the checks, etc., in Walsh's possession, and heard all he had to say which tended in any way to connect me with the Star Route cases. I understand that every member of that jury exonerated me from any complicity with these cases. The statements of Walsh are composed of truth and falsehood, which are so skillfully woven together as to create an impression unfavorable to me. It is true that I had the misfortune to have some business relations with Walsh in his capacity of banker. I am sure that if the testimony of Walsh before the Grand Jury were given to the public as it was given to the Grand Jury, the public could not resist reaching the same conclusion that the Grand Jury reached. The purpose of Walsh, evidently, in making a public statement, is to place himself in a better light before the public than that in which the Grand Jury left him when they came into court and said by their action that his testimony was not worthy of belief. The action of the Grand Jury relieves me of the necessity of replying to Walsh's statements in detail. If I deemed it necessary, I could readily and satisfactorily explain how Walsh came into possession of the checks referred to by him. I am confident, however, that the public are satisfied that the Grand Jury found that the possession of these checks by Walsh did not result from any illegitimate or dishonorable business transaction on my part. The whole matter having been settled by the legally constituted authorities, I do not propose now to discuss it in the newspapers. If, however, when the Grand Jury again meet, they desire to institute an inquiry as to whether Walsh has been guilty of perjury in stating that he divided the

proceeds of the postal draft referred to by him between myself and Mr. Brady, or in making other statements affecting me, I shall hold myself ready to go before them for examination.

W. P. KELLOGG.

About the same time an agreement was made between representatives of the Government and what was known as the Salisbury and Parker combination to submit to arbitration the questions involved in charges against those contractors. The Board of Arbitration was to consist of the second assistant postmaster-general, Mr. Elmer, one of the counsel for the prosecution in the Star Route cases, or a person named by him, and Robert G. Ingersoll, of counsel for the defense, or a person named by him.

The next question of importance to come up in the trial of Brady and others was that of admitting the testimony of Mr. John A. Walsh, who was called as a witness on the 18th of July. Counsel for the Government stated that it was intended to prove by him "that at about the same time when the routes mentioned in this indictment were increased and expedited, Brady had ordered increase and expedition on other routes, including the one held by Mr. Walsh; that Brady said to Walsh that when contractors got such expedition they paid him 20 per cent for the order; that he said to exact such a percentage was his invariable practice in such cases; that he said this was well known among contractors; that, having ordered expedition on Walsh's route, Brady claimed that Walsh owed him 20 per cent; that he said to Walsh that Walsh must have understood this, and that if he did not understand it he must be a fool; that he said he (Brady) did not expedite routes for fun; that Walsh must pay as others paid; that Brady made a calculation, and said that there was due him from Walsh more than \$30,000, and that he took up from the table the promissory notes he had given Walsh for his loans and put them in his pocket, saying that these had been a mere form, and that Brady had also told Walsh that the petitions were only a matter of form, to serve as an excuse for the orders made by him."

The admission of this evidence was strenuously resisted, but Judge Wylie decided to admit it. In rendering his decision on the 20th of July, he began with the statement that the question of the admission of this evidence was one of great difficulty and of importance to the case. He acknowledged that at the opening of the case he had believed that the declaration of one of the defendants could not be received until it had been shown that the declaration had been made in the furtherance of the conspiracy. But in this offense the authorities all lay down the rule that it might be proved by evidence of distinct, separate acts done by the different conspirators, and the law allows all of their acts, even declarations, to be proved if they are connected with the case. If they go toward making up the entire proof in their collective form, their admission is not irregu-

lar, and the law allows of their being proved. Now, as regards the declarations or admissions of the several parties, of course they are not evidence against the other parties unless they have been done in the furtherance of the objects of the conspiracy. But the evidence now offered for the Government was not for the purpose of showing criminal intent on the part of the other defendants. If the admissions of one party could be received against himself, the admissions of all could likewise be received. Greenleaf's rule, Judge Wylie said, was that the evidence against individuals could be received even though it was a joint suit. While all of the text-books were very emphatic in excluding the declaration of one defendant so far as it applied to others, they were all careful to make the reservation that it could be received against himself alone. So he was of opinion that the evidence offered was admissible. But as to the offer, it went to show only that Brady was in the habit of extorting and receiving money from parties. Now it seemed by no means a strained construction, that if the facts set out in the offer were testified to and believed, it would show that there was a corrupt administration of the affairs of the department. It would, however, depend greatly upon the amount of credit the jury would be willing to attach to this evidence, but upon its face the Court regarded it as pertinent to the case, and would admit it.

After Walsh's testimony was completed, an offer was again made to prove the confession of Rerdel through certain witnesses, including ex-Attorney-General McVeagh and ex-Postmaster-General James. On the question of the competency of this evidence, Judge Wylie made a ruling on the 24th of July, concluding as follows:

It is very true that no extra-judicial admission is sufficient to establish what is called the *corpus delicti*, and that rule applies as well to a case of conspiracy as to any other criminal prosecution. A man can not be convicted of murder on his admission. It must be proved that there was a dead body, that a man was killed, and then his admission will be taken as very strong evidence against him. In regard to conspiracy, the *corpus delicti* is the combination of the parties, not the criminal combination of the parties any more in the case of conspiracy than in the case of murder, because finding a man dead does not prove that anybody has committed a crime. In conspiracy, combination takes the place of death in the case of murder. The combination is the *corpus delicti*. The confessions of the parties may show the criminal character of the combination, just as, in the case of death, the confession of the man charged will convert the death into a murder. It is not murder because the man is dead. So in conspiracy: the combination is not conspiracy until the fraud upon the part of the combiners, the members of the combination, is established. And I think, having shown the combination between the parties with a view to obtaining money from the Government under these contracts, that is the *corpus delicti* in this case. The criminal purpose is another thing. That may be established by the acts of the several parties, or by their several declarations. It is unquestionably the law, whatever dicta you may bring from books, that in a trial for conspiracy the charge may be made out by proving the acts



of one of the conspirators at this point and at this time; by another of the conspirators at another place and at another time; by a third at another place and at another time, all having connection with the same subject. I think that no Court would venture to decide otherwise. The law is too well settled in regard to that. If, then, a man's act at one time, alone, distinct from others, another man's act at another time and distinct from all others, and a third one's acts at another time and distinct from all others, may be given in evidence for the purpose of weaving together the joint offense of conspiracy, then why should not the several declarations of these parties? I recognize fully the well-established point that no act of a conspirator can be given in evidence to charge his co-conspirators, unless that act was an act done in furtherance of the common object. That rule springs out of the law of agency. Unless a man is authorized to bind his fellow, his acts can bind nobody but himself. But if there be a joint partnership in civil matters or a criminal combination in offenses, there is a common partnership between them for the purpose of the combination, and they are each partners of the other in regard to that, so that the acts and declarations in furtherance of the common object will bind not only themselves, but bind their fellows. But when a combination, that is, the *corpus delicti*, has been shown, then I think the criminal character of that combination may be established by the several acts of the parties in the combination, each one, to be sure, bound only by his own declarations or acts. It is somewhat inconsistent, and it is very difficult sometimes to confine a piece of evidence to its legitimate purpose. After the purpose of the conspiracy has closed and the conspiracy is scattered, the members have no agency from each other, so that their acts bind nobody but themselves severally. But I do not know any authority, none has ever been brought to my attention, to the effect that after the *corpus delicti* has been shown, a man is not able to bind himself by his own confession. If one man in the combination can bind himself, each of the others can; and if they all confess, the combination is then proved to be a conspiracy, a criminal offense in contemplation of law. Now, as I said before, there are combinations that are lawful and there are combinations that are criminal. In the present case, it can not be denied that the evidence already before the Court is sufficient to show that these several contractors had intimate mutual relations and interests between themselves in these several contracts. It can not be denied that there is evidence, and a good deal of it, tending to show, and tending strongly to show, that there was a great abuse of discretion and power on the part of the second assistant postmaster-general in regard to these orders for expedition. Here is a combination in business; in intimate relations in business; money paid to enormous amounts without really any adequate returns to the Government; money paid by the second assistant postmaster-general to these parties; contracts entered into for service at one day in the week and then suddenly, in a very brief period, without apparently a motive in the world, increased to seven times as much, and that seven times service doubled by three or four times expedition of the whole, so that a small contract for \$2,300, or something like that, would run up to \$50,000, or \$60,000, or \$70,000. Well, now, these are things that are not to be whistled out of sight. They are not to be pooh-poohed away by a breath of one's mouth. Here are facts, in my opinion, going to establish what is called the *corpus delicti*. All that is needed to make, in my judgment, the charge criminal conspiracy, is the corrupt motive; and, as in the case of murder—the case of homicide, rather—the case of death, the death itself may be perfectly innocent, produced by nobody from any criminal cause in the world, but it may become criminal, and in the highest degree criminal, by a confession. The confession becomes united with the death, which was before innocent in the eye of the law, and converts it into a murder; and so here, all

this combination between these parties may have been an innocent combination with a lawful purpose. Men have a right to make money. They, in general, have a right to make the best contracts they can get in making contracts of that character, especially with the Government of the United States. It is a common trade. So, although all this combination, all this arrangement, may be innocent enough, yet it may be suddenly converted by the acknowledgments of the parties into a crime, because of the criminal purpose with which it is accompanied and the fraudulent means with which it was carried into effect.

The evidence for the prosecution was closed on the 28th of July. Among the witnesses who had been summoned was ex-Senator Spencer, of Alabama. Mr. Spencer was at one time in Washington during the trial, but when called did not appear. It proved that he had gone to the West, and, although he was in the employment of the Government as a commissioner of Pacific railroads, his attendance was not secured, and his whereabouts were said to be unknown. The evidence for the defense was begun on the 31st of July. The first witnesses were senators and others, who had joined in petitions, or made recommendations of an increase or expedition of service. An effort was also made to show the policy of the Post-Office Department in maintaining a liberal mail service, to assist in the development of newly-settled districts, but the evidence for this purpose, including that of ex-Postmaster-General D. M. Key, was excluded. In ruling out this testimony Judge Wylie said: "This Court is not going to sit, and is not now sitting, to decide a nice question of policy. We are engaged in trying a crime against the Government and laws of the United States. The Court knows no policy for the Government except such as is set out in the law, and no offender against the law can screen himself by producing postmaster-generals or senators or representatives who urged a certain policy upon him. He had the right under the law to expedite. He had the right under the law to increase the service. The policy of the Government is to be found in the laws, and to be measured by its law; not otherwise. The Supreme Court of the United States has decided that in the interpretation of the laws you can not look to the debates in Congress. They say that the policy of the Government is expressed in its laws, and the laws are not to be interpreted even by the debates that took place on their passage. It was said that this policy was the policy adopted by the second assistant postmaster-general under certain advice, and that it was a right policy. Well, suppose it was right: suppose he had the power to adopt this policy, and the policy was correct in principle: what does that tend to do in this case? What influence has that upon this case? Why, Lord Bacon defended himself against the charge of bribery by saying that his decisions were right. He took bribes for deciding correctly, but he was properly convicted of bribery, and stripped of his gown and reduced to



disgrace. Well, suppose that this policy was right. Admit that it was right. We are not trying a question of policy. We are trying a question of crime. And suppose that the offense charged in this indictment is nevertheless made out, what becomes of your policy? The policy passes for nothing, no more than the correctness of Bacon's decisions could be a shield against the charge of bribery. It is not the policy we are inquiring about; it is the charge of corrupt conspiracy for the purpose of establishing those routes, or rather for the purpose of expediting and increasing the service."

The only one of the accused placed upon the witness-stand was Harvey M. Vaile, whose interest in the contracts was first acquired in August, 1878, and the testimony for the defense closed on the 7th of August. One day was occupied with rebutting testimony, at the close of which Mr. Bliss presented an affidavit with reference to the witness Spencer, covering a statement of the efforts to secure his attendance, and the facts which it was expected to prove by him. In this it was said that Spencer could testify that on one occasion he was present in the room of the defendant, S. W. Dorsey, when the latter took from his pocket and placed in an envelope six bills of \$1,000 each, and laid the envelope with the bills in it on the table, telling him he expected the defendant, Thomas J. Brady, to call in a short time, and he wished to show him (Spencer) what sort of a man Brady was, and how he (Dorsey) did business; that in a short time Brady called, and that, after a few moments of casual conversation, Dorsey told him that some one had left an envelope for him, and that Brady took the aforesaid envelope, put it in his pocket without opening it, and soon afterward left, carrying it with him; that prior to that time, and when speaking of Brady's calling, the said Dorsey had stated that Brady was a thief, and had further said that he (Dorsey) was interested in mail contracts; and it was further stated, on information and belief, that Spencer could testify that, at a time subsequent to the conversation, Stephen W. Dorsey came to the room of said Spencer, in the Everett House of New York, in great trouble and despondency, and stated to him (Spencer) that his clerk had "gone back on him," and had "given away" the whole story, and had betrayed the whole business, with more to that effect; and that some days later the said Dorsey stated to said Spencer that the matter had all been fixed up; that Mr. James W. Bosler had sat up with the said clerk all night, and had finally succeeded in persuading him to make an affidavit denying his original statement.

A counter affidavit was filed by Mr. Ingersoll, denying the allegations of Mr. Bliss's statement. A sworn denial was also made by General Brady, and filed by the defense. The summing up on the part of the prosecution

was begun on the 9th of August, by Mr. Ker, who occupied three days in addressing the jury and bringing together the facts, as he claimed they had been proved by the evidence produced. The first address for the defendants was made by Mr. R. B. Carpenter, who began on the 14th and concluded on the 15th, and was followed immediately by Mr. R. T. Merrick for the Government. Mr. Merrick admitted that the case had not been proved as to Turner, but claimed that all the other indicted persons, save Peck, who was dead, had been proved guilty of the crime charged. He was followed by Mr. Chandler for the accused. In the course of his address a colloquy occurred between counsel and the Court as to the necessity of convicting all or none of the defendants. Judge Wylie stated, without making any formal ruling, that "so long as there are two to be convicted, the Government may fail as to all the others. If the jury are satisfied that two are conspirators, a conviction is proper, though the charge in the indictment was against them and many others." The address of Mr. Chandler was completed on the 17th of August, and the argument for the prosecution was taken up by Mr. Bliss and continued for the greater part of two days. On the 21st, Mr. Williams and Mr. Totten addressed the jury for the defense, and were followed the next day by Mr. McSweeney on the same side. He occupied two days, when Mr. Merrick again took up the case on behalf of the prosecution, and summed up the evidence in an address, which covered three days of the sessions of the court. He was followed by Mr. Wilson and Mr. Henkle for the defense. The latter, who was counsel specially for Mr. Vaile, occupied nearly three days, and concluded on the 4th of September. On the last of these days he was somewhat sternly checked by the Court for persistently attempting to comment upon what ex-Postmaster-General Key might have testified to. Mr. Henkle was followed by Mr. Ingersoll, who occupied part of two days. The closing address for the Government was made by Attorney-General Brewster, who began on the 6th and concluded on the 7th of September. At the close of the session on the latter day, Judge Wylie, after arranging for the presentation of the prayers of counsel as to the points of the charge to the jury, made the following statement:

Several of the members of the jury have come to me with the information that they have been approached with propositions most manifestly of a corrupt kind. The first intimation I had of this kind was several weeks ago. Several more—I can not call them intimations, they are square and direct informations given to me privately for the purpose of asking me what they (the jurors) should do. My advice was to say nothing about it. The Court did not want to interrupt the progress of the arguments of the case by any such side question as this. But I advised them to be careful. This thing has grown, and within the last twenty-four hours it seems that these wolves, which have been around this jury, have become fiercer, more determined. I felt so much indig-



nation that I was almost ready to advise the jury men to shoot the men on the spot. That is the way I felt about it, but I gave no opinion. But villainy of this kind, scoundrelism of this degree, deserves no mercy. I do not say in what interest these suggestions have been made—I do not want to convey any information on that subject—but I want to advise this jury to reprobate with scorn and indignation any base attempt of this character on their virtue and integrity. The insult is of the last intensity, and I do hope that when we get through this trial fairly you may have information enough to enable the Court to lay its hands on men of this kind—on these men who have approached you in this way. I have called your attention to this subject with another view—to give a warning to men of this kind of what they are about, and that the officers of the law will do their duty. If it is possible to ferret out these scoundrels, it shall be done. Give them no quarter. Spurn them with the end of your toes. No baser vermin infest the earth than men engaged in this kind of business, and the insult to you is that they suppose that you are just as base, just as low, as they are themselves. No man should allow a whisper of this kind to be made to him without spurning it with the utmost scorn and contempt, if he goes no further. I do not advise violence at any time. Of course I do not. But next to the insult that is given to a man's wife is an insult of this kind to a juror. His honor should be as sacred and as carefully guarded as he would guard the honor of his wife. Having said this much collaterally at this point, we can now take a recess.

Protests were made by counsel of a desire to have the subject thoroughly looked into. The case was submitted to the jury on the 8th of September. In his charge to the jury, Judge Wylie spoke as follows regarding the features of the indictment and the necessities of proof under it:

This indictment may be said to have five features. The first is the historical part of the indictment. The second charges a conspiracy. The third describes the overt acts alleged to have been committed in pursuance of the conspiracy. The fourth alleges the overt acts. The fifth charges the partition of money alleged to have been fraudulently taken from the Government of the United States. As to the historical part, we know all about that, because it is found in the acts of Congress establishing the Post-Office Department. You need trouble yourself in no respect in regard to that. As to the means used in carrying out the conspiracy, you need trouble yourselves nothing about them. Whether they are properly described or not in the indictment, is of no consequence in this trial. As to the distribution of the money, that is a matter that will be determined by your finding on the question of conspiracy and the overt act. If you find the conspiracy, the distribution of the money follows. You can not find the existence of this conspiracy as charged in this indictment without finding that the conspiracy was for the purpose of dividing the money among themselves and of defrauding the United States. So, if you find the conspiracy, you find the truth of this part of the indictment. In fact, the only consideration about which the jury need concern themselves in their deliberations is whether there was a conspiracy, followed by overt acts. It has never been held on the trial of an indictment for conspiracy, that the Government was bound to prove the exact means described in the indictment. So, when the indictment declares that there are several contractors having nineteen different contracts, and that they were mutually interested in the contracts, that is a matter of historical detail or description, or means not entering at all into the charge of conspiracy. Whether these parties were mutually interested in the several contracts or not, is of no consequence. The conspiracy did not give them a common interest in those con-

tracts, but it was a conspiracy in regard to those several contracts. The parties remain several owners in their own contracts, but bound together by the tie of the conspiracy, and it was in that view that the Court held that an overt act, done under one of those contracts, was an overt act as to them all, because they were all a common subject of conspiracy. . . . It is in your power to acquit every man of these defendants, except two, and find them guilty. It further follows that if you should acquit one of these conspirators, and the overt act was his, and there were no other overt acts in the case, you can not convict any of them. The defense claims that the conspiracy must be made out as to all these contracts, and that unless the conspiracy is established under each of the contracts there must be an acquittal of all of the defendants. That is not so. If you should be of opinion that there was a conspiracy between the defendants, though relating to but one of the contracts, that will sustain the indictment. These matters are the means and instruments of making out the charge of conspiracy, and if there is enough left in the evidence showing that there was a conspiracy as to one of the routes, followed by an overt act, the conspiracy is established. Surplusage in an indictment will not vitiate it. If it did, bad luck to many indictments. This indictment is one, and charges one offense. Though long, it contains but one count. The instruction of the Court is asked on the question whether, if there be two conspiracies proved, there can be a conviction. I am of opinion that there can not be. You may acquit part of the defendants wholly and convict others, but if you be of opinion that the proof shows two conspiracies, that will not do, and the indictment fails.

Now, as to the proof of the indictment. The people who commit crimes avoid the light, and all crimes are more or less difficult to establish for that reason. But as to conspiracies, they are peculiarly products of darkness. They are very seldom reduced to writing. They are entered into generally in an informal way. The parties may not come together at all. They may live in different parts of the country. But if by any means they come to a mutual understanding for the purpose of committing a crime against the Government, that is a conspiracy, provided it be followed by an overt act. It is said that you ought not to convict a man upon circumstantial evidence, unless it be of the clearest and most convincing character. The rule is that you should be satisfied in your own minds beyond a reasonable doubt. But the reasonable doubt ought to arise out of the evidence in the case; it ought not to be a conjecture. It ought to be a doubt supported by a reason. The jury ought to be careful to see that the doubt is right, and arises from evidence.

The Court then proceeded to recall and comment upon the facts in the case of one small route in Dakota which had been originally let to J. W. Dorsey at \$398, which was afterward consigned to Vaile, contrary to law, through the device of a sub-contract, and upon which expedition and increase had been ordered until the compensation was \$6,133.50. The revenue of the route for the year ending June 30, 1881, was \$240. There had been petitions for increase backed by a request of the delegates of Dakota in Congress; but there had also been petitions of postmasters, supported by similar influence, asking for a restoration of the old schedule of time, which had been disregarded. Having recalled these facts, the judge expressed himself as satisfied that the law of Congress permitting the Postmaster-General to place service upon the Star Routes was drawn in a liberal way in order to allow him to exercise



his discretion fairly in regard to the increase of service and expedition whenever the public interest required such increase to be made. But here was an increase made at a heavy expense when the revenues had begun to run down. It could not be negligence. Negligence itself was a crime, when the injury fell upon the innocent and when the negligence was gross. There was no evidence in the history of this route to show that this remarkable result sprang from negligence. Manifestly it was purposely done; it was done with a motive. The question for the jury to consider, in trying this case, was whether the action of the second assistant postmaster-general was a mistaken exercise of his discretion, or was taken purposely, and with such a motive as ought not to inspire any man. It had been argued in this case, that if increase of service and increase of expedition have been allowed—granted, rather—in instances where there have been fraudulent papers, fraudulent affidavits, untrue affidavits, still, if the public service had been promoted, the acts of these parties, if they be criminal, are not subject to punishment, because they result in no injury to the public. He thought there was no soundness in such a view as that. That was doing evil that good may come, and that was neither good gospel nor good law. In regard to the proof of the conspiracy, several prayers had been presented, containing the principle that the conspiracy must be proved independent of the overt act; that the conspiracy could not be established *a posteriori*. Now, that was not so, and it had never been so. The proof of the conspiracy may be made out from the consequences that followed from the conspiracy.

On another important point the Court said:

The doctrine is maintained in several of the prayers, that if the jury believe that expedition was ordered on false affidavits, and there were genuine papers on file, they must attribute the order to the influence of the genuine papers. Is the bad saved by its alliance with the good? That, gentlemen, is not to be tolerated. That doctrine can not be tolerated in any court. There is nothing so odious in a court of justice as fraud. It is not only vicious itself, but it contaminates every thing that is associated with it. It is like a drop of poison in a tumbler of pure water. The party who commits a fraud very often finds it convenient to use truth for a scheme of falsehood. Truth and falsehood are always quarreling when left to themselves. The truth is, that falsehoods are of so impish a nature that they quarrel among themselves. But fraud is not exactly identical with falsehood. Fraud is a double cousin to falsehood, no doubt. But fraud, for its own purposes, will make use of truth or falsehood indiscriminately. Truth is impressed very often into the service of fraud, and can not get away. I have seen fraud of the most abominable character with a line of truth in its front, and all its impish tribe behind. The more of truth fraud can work into its service, the better chance is there for its success. But it is no less fraud after all. So that the fact that truth is sometimes found under the banners of fraud, is not to be suffered to justify the case of fraud.

In conclusion, the judge made an earnest appeal to the jury to disregard all improper efforts to influence their action.

The jury went out about noon on the 8th of September, and the Court took a recess until 6 o'clock to await the verdict. At that hour it was announced that they had not agreed "except as to one of the defendants"; and they were directed to retire for further consultation, and a recess was taken until 10 o'clock the next day. At that time no agreement had been reached, but the foreman desired to ask of the Court for further instructions, and handed up a paper. Judge Wylie said the jury had a right to be instructed by the Court upon any difficulty regarding the laws. As to the question of fact, that was their province. It seems, from the question, that the jurors were divided in opinion in regard to whether there were one or two conspiracies after May 30, 1879. That he understood to be the substance of the question now presented to the Court. It was a question of fact. He had endeavored to advise the jury yesterday in regard to the law to be applied to the fact in regard to this question. He could only repeat now substantially what was said yesterday—that if the jury were of opinion that the evidence showed that there were two conspiracies instead of one, it was impossible to find a verdict under the indictment. This was an indictment for one conspiracy, but it was not necessary that all of the defendants should be guilty, or none. It might be that some were not guilty of the conspiracy, and others guilty. As to the effect of the interchange of interest between certain of these defendants, which, it was claimed, took place about March 30, 1879, the Court had instructed the jury that no mere change of interest in the contracts ought to affect at all the question of conspiracy. If the conspiracy continued still, the interchange of interest between the members of the conspiracy would have no effect whatever on the conspiracy itself.

In reply to the question whether the date of an overt act as proved must agree with the date as set forth in the indictment, the Court replied:

This indictment is based on the statute approved May 17, 1879. You, gentlemen, have been sworn to try the case of conspiracy under that law, and the character of the conspiracy is set out in this indictment. If you believe that these defendants, or any of them, are guilty of this conspiracy, that is one step settled. When you reach that conclusion, sink a post there. That question being settled, the next one is as to the overt acts. There are forty or fifty pages of this indictment employed in setting out distinct overt acts. If any one of those overt acts is correctly set out, and such an act corresponds with the indictment, it is enough, though all the others may be incorrectly set out. I called your attention yesterday to the Vermilion and Sioux Falls route. I compared the overt act set out in the indictment with the overt act as it is proved in this case. The overt act in this case as proved corresponded in date and form to the overt act charged in the indictment, if you believe the evidence. I did not think it was necessary to go over all these overt acts *seriatim*, but I confined myself to a specimen. If in your judgment there is one conspiracy established as in existence since May 20, 1879, and it was in existence at the date of these overt acts, or any one of them, committed by any of the defend-



ants belonging to this conspiracy, the case is made out.

Counsel interposing here with requests as to instruction on certain points, the Court declared that the time had gone by for that, and refused to be interrupted, continuing:

The law requires that the overt act shall be proved as laid. There must be one or more overt acts identical with the charge in the indictment. The proof must be that some overt act described in the indictment has been made out. There are about forty overt acts described in the indictment, and if none of them are described correctly according to the evidence except one, and you find that the proof in regard to that one corresponds exactly with the description of the overt act in the indictment, that, I tell you upon my responsibility under the law, is sufficient. In regard to the overt act on the Vermilion and Sioux Falls route, if there be a paper in a case requiring interpretation, that interpretation belongs to the Court, and there is no question between the Court and the jury on such a proposition as that. It is absolutely the business of the Court to interpret written instruments. I read in the indictment the description of the overt act in regard to a certain route, and I read on the jackets produced here a description of an overt act done by one of the defendants, and that description corresponded verbatim to the last and minutest particular with the description in the indictment. It became the duty of the Court to say to you, gentlemen, that if you believe that the jacket is a genuine paper, and the order, signed "Do it, Brady," was written by Brady, there is no escape that the overt act is proved. I think now, gentlemen, I have made myself as plain as I am capable of doing.

Exception was taken to some of the remarks of the judge, and a colloquy ensued, during which the Court repeated to the jury, "Be sure you have a conspiracy, and then be sure that some overt act (one or more) performed by one of the conspirators is proved as laid, and, so far as you are concerned, the question is settled." In reply to a statement of Mr. Totten, that he excepted to all the Court had said, the judge replied: "I do not think that what I have said is at all gratifying to the gentlemen. I think that they do not like the law, and they have a right to except to it, and to hold the Court responsible to a higher tribunal." In reply to an exception of Mr. McSweeney to the expression "there is no escape" from certain conclusions, the Court said:

I will explain that, too. We are talking so that we can get the proper grounds for a decision in this case, and I shall be ready at all times to talk with the jury in regard to any difficulty they may have. As to the validity of the indictment, you are not judges. The Court has passed upon the indictment as a valid indictment long ago. We are engaged in trying not whether the indictment is a well-drawn instrument, but whether the evidence sustains the indictment. There is a conspiracy charged to defraud the Government, and there is only one conspiracy charged. You may find any two or more of the defendants guilty under this indictment. If the others are guilty of something else, they must be acquitted. Now, as to the overt act. If an overt act set out on the indictment is an overt act done by one or more of the conspirators, and that act is proved, I do not see where there is any gap left between the conspiracy and the overt act. If you are satisfied that the conspiracy exists, and then that an overt act has been proved as set forth in the indictment, the two elements necessary for a verdict are linked together by hooks of steel.

Where an overt act is proved in writing, the Court has a right to say whether that overt act corresponds in form to the overt act described in the indictment. It is for you to say whether those papers were brought from the department, whether this signature of Brady is a forgery or not, whether the execution of that order has been proved. But I am bound to say, that when a man's signature has been proved on one side, and not disputed on the other, it makes a pretty strong *prima facie* case.

Some of the jury remarking upon the difficulty of recollecting the dates and particulars of the evidence, Mr. Ingersoll expressed a willingness that they should have a copy of the record. This was objected to, but it was agreed that they might have recourse to their own notes, which they had been required to leave behind them in the first instance. The jury was dismissed, and not again recalled until 6 o'clock p. m., at which time the foreman said: "We desire to report to the Court that the jury have come to an agreement as to some of the defendants named in the indictment, not as to others." The Court was unwilling to accept a verdict in that form, saying: "The verdict of the jury, in my judgment, ought to be complete. You have a number of defendants here. Those who are guilty (if there are any) will have to submit, of course, to a verdict. Those who are innocent (if there are any) are entitled to the verdict of the jury. I do not mean to say that if, after a fair test, the jury should come into court and say that they are able to agree on a verdict as to some, but that they are really unable to agree as to others, the Court might not accept such a verdict. But it would only be after a longer trial on the part of the jury." In reply to a suggestion of Mr. Ingersoll, that if the jury were ready to acquit any of the defendants they might as well have the benefit of it at once, the judge said: "When it comes to the time when the Court is prepared to discharge the jury, and the jury should say, 'We find certain of the defendants not guilty, and are unable to agree as to others,' that would be the time for the Court to determine that question. But that time has not come. I think that no instance could be found in which a court of common law has accepted a verdict of acquittal as to one to-day, as to another to-morrow, and as to another the next day, or proceeded on any other such principle as that." The jury were shut up for another night, and, although the next day was Sunday, the Court met for the purpose of receiving their report, there having been no adjournment, but only recesses, since Friday. No agreement had been reached on that day, and the marshal was directed to enforce the common-law rule, and shut the jury up in their room until a verdict was reached. On Monday, September 11th, it was decided to accept as final such report as the jury had to make. At the morning session of the court on that day, the foreman, in reply to the usual question as to agreement, said: "I will report, sir, that the jury stand the same as they did

Saturday night. We have decided as to four of the defendants, and do not agree as to the others." The judge was unwilling to discharge the jury at that time, and they again retired, to be recalled in the afternoon. There was then no change in the result of their deliberations, and Judge Wylie said: "I have come to the conclusion to accept your verdict." "I am instructed," said Foreman Dickson, "by the jury, upon this indictment to make the following return: As to John M. Peck and W. H. Turner, not guilty; as to J. R. Miner and M. C. Rerdell, guilty; as to J. W. Dorsey, as to S. W. Dorsey, as to H. M. Vaile, and as to T. J. Brady, the jury are unable to agree." By order of the Court the name of Peck, who was dead, was omitted, and the verdict was recorded. The verdict seemed to give satisfaction to no one. Notices of motions for arrest of judgment and new trials were given immediately in behalf of Miner and Rerdell. The judge, in discharging the jury, followed the customary compliments with the remark that the verdict was not such as he would have been glad to receive, but he added: "It is your verdict, your work; you are responsible for it, and the Court is not." The foreman asked if he could present a sworn statement regarding attempts to bribe jurymen, but was not permitted to do so at that time. It transpired that on the final ballot in the jury-room the vote stood eleven for conviction and one for acquittal in the case of Vaile, ten for conviction and two for acquittal in the case of Brady and J. W. Dorsey, and nine for conviction and three for acquittal in the case of S. W. Dorsey. Jurymen Holmead voted for acquittal in the case of Vaile; Brown and Holmead in that of J. W. Dorsey; Brown and Dickson in that of Brady; and Brown, Dickson, and Holmead in that of S. W. Dorsey. The Attorney-General gave directions at once for preparation for a retrial of those regarding whose guilt the jury had disagreed, and the motions for a new trial of those who were convicted were promptly granted.

The investigation of the charge that attempts were made to corrupt or improperly influence the jury was placed by the Department of Justice in the hands of Mr. H. H. Wells, as special counsel. Mr. Dickson protested against this course, as the department was itself implicated, but it was explained as necessary on account of the press of business in the District Attorney's office. The charges related to alleged attempts upon Mr. Dickson, the foreman of the jury, and upon Jurymen Brown in the interest of the Government, and upon Jurymen Doniphan in the interest of the defense. Mr. Dickson had put his charge in the form of a sworn statement before the close of the trial. It was this which he endeavored to bring to the attention of the Court, and which he was afterward accused of using in the jury-room for the purpose of improperly influencing the verdict. He declared that on the 22d of August, at a popular resort known

as Driver's, he had been approached by Henry A. Bowen, who represented himself to be a special agent of the Department of Justice, and who intimated to him that \$25,000 would be at his command if he favored a conviction of the defendants in the pending trial. He declared that Bowen exhibited papers in proof of his appointment as special agent, professed to have authority from the department for his offer, and appeared to be acting with the concurrence of Mr. Brewster Cameron, one of the subordinates of the Attorney-General. The charge with reference to Jurymen Brown was that one Frank H. Fall, employed as a special agent by the Department of Justice, had tried to secure his signature to an agreement that he would vote for conviction, for \$2,500. According to the affidavits relating to this matter, Fall had employed Thomas R. Foote, who carried on the negotiation with Brown through Arthur Payne. Jurymen Holmead also testified that Fall had talked to him about the position of the jury, and the suspicion with which some of its members were regarded by the prosecuting counsel. In the case of Doniphan, it was said that one Frederick C. Shaw, who had been originally on the jury panel, but had been challenged by the prosecution, had approached him with an offer of money in behalf of S. W. Dorsey, if he would vote for acquittal. This was testified to by Doniphan himself. Mr. Wells made a report to the Attorney-General of the result of his investigations, near the end of October. With reference to the case of Dickson, after stating the points of the testimony which he had been able to collect in regard to the conversations with Bowen at Driver's, he gave the following as his conclusions:

Henry A. Bowen had no authority from the Department of Justice, or any officer or subordinate thereof, to make any offer to or treat with Mr. Dickson on any subject relating to the Star Route trial. That Mr. Bowen did not bribe, offer to bribe, or attempt, in the language of the statute, "to corruptly influence" the action of Mr. Dickson as a juror. That conversations did take place between Dickson and Bowen during the progress of the trial that were highly improper and unbecoming, but that the foreman did not believe that Bowen was acting or speaking with the knowledge or approval of the Attorney-General, or any person in charge of or connected with the prosecution of the Star Route case; that he did not believe that any real attempts at bribery were made or intended, but that he did believe that Bowen's purpose was to find out "whether the jury could be bought"; and that Dickson, though so believing, prepared his sworn statement on the night of the conversation, and made an unwarrantable use of it before the Court and with the jury in the jury-room, when they were considering their verdict, with the apparent purpose of securing the acquittal or preventing the conviction of some or all of the defendants. That Dickson sought an interview with Cameron, apparently for the purpose of obtaining from him some proposal, suggestion, or intimation, to be used before the jury for the purpose of bringing the conduct of the Attorney-General and his subordinates into dishonor and contempt, and thereby to influence the jury to acquit the accused.

His conclusion with reference to Brown's case was put thus:



It is apparent from the whole history of the alleged attempt upon Brown's virtue, that it was not done with the knowledge, in behalf of, or in the interest of, the prosecution; that its guilty authors were neither the agents nor acted with the knowledge or approval of any officer of the Department of Justice. It was a deliberate and carefully prepared conspiracy against the administration of justice, which view is confirmed strongly by the following considerations and circumstances:

1. That the Government could have no interest or desire to bribe jurors to convict. It would seem that those charged with the administration of justice would, from their position, have a natural desire that a full, fair, and impartial trial should end, if the accused were innocent, in an honorable acquittal.

2. There was no fund in the Treasury of the United States out of which the large sums alleged to have been offered in bribes could have been fixed, without making a public record of the infamous transactions, and specifying therein not only the amount and object of the disbursement, but the names of the persons to whom it was paid; nor could it be done even then without the connivance of other departments of the Government.

3. As soon, too, as the first intimation reached any officer of the Department of Justice that improper suggestions had been made, or it had been claimed that any one had authority to make such proposals, the authors thereof were summarily dismissed, and their pretended authority indignantly denied.

4. That every person who had made such false claim of authority, including Fall and Taylor, when charged therewith admitted the falsity thereof; and all persons present at any conversations between officers of the department who employed them or gave them their instructions deny that any such authority was ever given them.

5. That Brown, who, it was charged, had been bribed in another case; Taylor, who had before served a term in the penitentiary, and who procured Fall to be employed because of the latter's connection with the prior bribery; Nelson, who had received money from Fall to pay Brown for "hanging the jury" in the Long case; Laws, who claimed that he was the man who engaged Brown in that case, and who also claimed that he had been engaged by the defense to work Brown in this case; Foote, who employed Payne to bribe Brown, and brought him to Fall's office, seeing, as he says, Fall daily in reference to that matter; and, indeed, every one of the vile creatures who touched this infamous transaction, come forward without shame, but for what consideration I do not know, and put the proof of their guilt, in the form of affidavits, into the hands of counsel for the defendants.

Their crime was not lessened, but rather aggravated thereby. If any of them have had promises of immunity, they were not made by the Government, its officers, counsel, or agents, and I therefore recommend that for the offenses thus committed by them, both severally and jointly, they be jointly and severally indicted and tried under the laws and statutes applicable to such cases. This recommendation refers to Frank H. Fall, Arthur Payne, Thomas A. Foote, and any other persons discovered to have participated, aided, or abetted in that transaction. As to some of them, however, I must add that, for a successful prosecution, it will be necessary that the Government should be furnished with the affidavits published by Mr. Ingersoll, for which I have applied, and I assume they will be furnished.

The facts in the case of Doniphan were recapitulated in the report, and the counsel stated that there was "such a clear and unequivocal case of violation of the law against corruptly attempting to influence the action of a juror, as to leave no doubt of the propriety of a criminal

prosecution of the person attempting to corrupt this juror." He accordingly recommended that "Frederick C. Shaw, and all other persons who may be found to have aided or abetted in the offense, be immediately prosecuted on that charge. Warrants were issued for the arrest of Fall, Foote, Payne, and Shaw, and, after a preliminary examination in the police court of Washington, they were held for the action of the Grand Jury. In the course of the examination in the case of Payne, who was the first to be arraigned, George D. Miller, one of the Government detectives, admitted that he was accustomed to reveal to the defense information which he had collected in the service of the Government. He was subsequently dismissed. In the course of Mr. Wells's investigation, a sworn statement was made by Mr. Brewster Cameron, agent of the Department of Justice, explaining the employment of Fall. He had been introduced to Mr. Cameron by Edward Taylor, an employé of the department; and James Leonard, of the Marshal's office, declared that he had positive knowledge that Jurymen Brown had accepted a bribe in a former case. Fall desired to be employed for the purpose of collecting and presenting the proof of this, and was so employed. He afterward suggested that, if he could have command of three or four clerkships, he could control the action of two jurors. The suggestion was promptly resented, and Fall was at once dismissed from the service of the Government. The statement of Mr. Cameron was supported by affidavits, including one from Fall himself.

During the month of December, William Dickson, who had been foreman of the Star-Route jury, underwent trial in the Washington Police Court on a charge of violating the law in reading his statement to the jury for the purpose of influencing their action. The result of it was that he was held to await the action of the Grand Jury, and in January, 1883, both he and the others charged with attempting to influence the jury corruptly were indicted.

The new trial of the defendants in the Star Route case was set for December 4th, the opening of the new term of the Criminal Court. Judge Wylie presided as before. The names of two of the defendants were eliminated, that of Peck by death, and that of Turner by acquittal; and those remaining were Thomas J. Brady, Stephen W. Dorsey, John W. Dorsey, Harvey M. Vaile, John R. Miner, and Montfort C. Rerdell. On the 11th of November Mr. George Bliss, of counsel for the Government, had made a report to the President, in which he complained of the attitude toward the case of the Marshal of the District of Columbia, Col. Charles E. Henry; the Postmaster of Washington, D. B. Ainger; the Assistant Postmaster, M. M. Parker; and the foreman of the Government printing-office, M. D. Helm, the last-named being also the manager of a newspaper which had defended the accused and assailed the prosecution. The report of Mr.



Bliss was referred to Attorney-General Brewster, who, on the 24th of November, addressed a letter to the President reviewing the action of the marshal, postmaster, assistant postmaster, and foreman of the Government printing-office, and referring to the conduct of George E. Spencer, also an officer of the Government, who had evaded the process of the Court as a witness, and to the course of the police of the District of Columbia. In conclusion, he said:

After serious and prolonged deliberation over all the details of the case, my investigation satisfied me that the men who were indicted were guilty men, and merited the extreme punishment of the law. They had projected, under cover of official power and under color of official authority, a systematic plan of deliberate robbery of the public Treasury. To carry out that plan, they had laid their hands upon a fund dedicated by law to a great public service—a service that is conspicuously one of the fruits and causes of our civilization, our social comfort, our commercial prosperity, our national growth. Millions of that money they perverted to their own private gain, and divided it for their own personal purposes. It was a condign act of infamous conspiracy, and as such deserves the severest punishment the law can inflict. Such men are traitors to social and official duty, and they are public enemies, against whom the authority of the law must be exerted without hesitation or reluctance. The higher their past position the greater their sin—the sterner must be their punishment. I desire to call your attention to the fact that the officers of the law, and those who have directly been aiding me in the discharge of my duty in this business, have been from the first encircled with snares, pitfalls, and every species of vile device that could be invented to harm them, hinder their usefulness, and prevent the administration of justice. Some portions of this community who surround these defendants, and who have enjoyed, or do still enjoy, minor official positions, know no allegiance to any one but this band of robbers, and render no service to any one but these evil employers. From motives of gain, or other corrupt considerations, they are saturated with affinities for these bad men; and they have contributed, by every means in their power, at the bidding of their masters, to obstruct public justice and to defame its officers, with the hope of securing the acquittal and escape of the worst band of organized scoundrels that ever existed since the commencement of the Government.

This communication was followed promptly, on the 25th of November, by the removal from office of Henry, Ainger, Parker, Helm, and Spencer. Mr. Clayton McMichael, of Philadelphia, was subsequently appointed Marshal of the District.

On the 1st of December, Stephen W. Dorsey addressed a card to the public in explanation of his connection with Star Route contracts. He took occasion to refer to his political service, his activity in the canvass of 1880, and his intimate relations with General Garfield and other prominent Republican leaders. He attributed his prosecution to the hostility of Postmaster-General James and Attorney-General McVeagh, whose appointment as members of the Cabinet he had opposed. He denied all charges of conspiracy and fraud, and claimed that his connection with the Star Route service sprang from an innocent and well-meant effort, in the first instance, to render pecuniary aid to his brother

and brother-in-law (Peck), who had become contractors against his advice, and afterward to save himself from loss through the loans and advances which he had made. He maintained that the facts which he stated showed—

1. That at the beginning of President Garfield's administration two members of his Cabinet, whose personal hostility to me had grown out of my active opposition to their appointment to the positions they held, led them to seize upon the old Star Route scandal and use it as a weapon to break down my influence with the Administration.

2. That to do this, it was necessary to fill the public press with revamped falsehoods that had long since been worn and patched, and for this purpose there were established in the offices of the Attorney-General and Postmaster-General literary bureaus, beginning April 1, 1881, and up to this writing there has not been a day in a week nor a week in a month that the papers all over the land have not denounced me in unstinted terms, with no more evidence to justify their accusations than there is against every other person in the land.

3. That at a trial lasting more than four months, which took place after the country had been raked with a fine-toothed comb by detectives to find something damaging to me, there was not one line, word, or syllable of evidence produced against me. In the printed record of the court proceedings, containing more than 3,000 pages, there is not a scintilla of evidence that could be fairly charged as reflecting upon the uprightness of my conduct.

When the new trial began, Mr. W. W. Davidge and Mr. William A. Cook appeared as additional counsel for the defense. The time until the 14th of December was occupied in obtaining a jury. The question of the number of challenges to which the defense was entitled was reopened and argued at length, and Judge Wylie came to the conclusion that his former ruling had been erroneous—that they were entitled to only four peremptory challenges in all. In reading his new decision, he said that he would lose no time in explaining the conflict with his previous ruling. The statute relating to that subject (No. 888 of the Statutes for the District of Columbia) provided that a defendant shall be entitled to four peremptory challenges, but had no provision as to a case where there was more than one defendant. But a section of the Revised Statutes (819) did contain such a provision—to the effect that in all other cases (less than felony), civil and criminal, each party shall be entitled to three peremptory challenges, and that where there are several defendants or several plaintiffs, each side shall be deemed a single party for the purpose of challenges. This latter section was the law in this District, and had been since December, 1872. The two statutes should be read together (they not being in conflict), and, therefore, he ruled that the defendants in this case were entitled to four (not three) peremptory challenges for all of them.

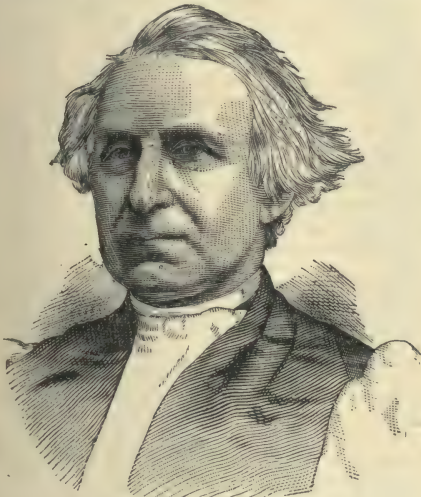
Another question was also raised as to the necessity for the personal attendance of the accused. Mr. S. W. Dorsey was troubled with an affection of the eyes, which was said to necessitate close confinement to his room. To test the question, a motion was made by Mr.



Merrick that Mr. Dorsey be compelled to appear in person in the court-room. This was approved by his counsel, who took the ground that his presence was necessary to a fair trial, but that he was unable to attend, and the trial as to him could not proceed. The Court held that the defense could be just as well maintained in the absence of a defendant, except in case he proposed to testify in his own behalf. The Court would be prepared to meet that point when it came up, but refused to postpone the trial. Mr. Ingersoll then moved for a severance on the part of S. W. Dorsey, and the continuance of the case as to him, but this was refused. The challenges on both sides were exhausted when ten jurors had been obtained. The jury, as completed on the 14th of December, was made up as follows: John H. Crane, commission merchant; John Hughes, carpenter; Clarence Shields (colored), carpenter; Reese Evans, stone-cutter; Frank Renshaw, grocer; John B. Sheriff, truck farmer; John H. Vernon, restaurant-keeper; Jackson Howard (colored), hotel fireman; Mason Lowery, laborer; D. C. Green, real-estate broker; Michael Horgan, blacksmith; Edward C. Gill, dealer in paints and oils.

Mr. Bliss, for the Government, proceeded at once to open the case. His address was finished on the 19th, and Mr. Chandler began the opening for the defense, which was continued by Mr. Ingersoll on the 21st and 22d. The taking of testimony was not begun until January, 1883.

STEVENS, Right Rev. WILLIAM BACON, D. D., LL. D., Bishop of the Diocese of Pennsylvania, born in Bath, Me., July 13, 1815.



WILLIAM BACON STEVENS, D. D., LL. D.

Having lost his father in early life, he spent his youth in Boston, Mass., and entered upon a course of study at Philips Academy, with reference to preparation for the ministry. In

consequence of impaired health he gave up for a time his studies in this line, and turned his attention to the science of medicine. Soon after, he took a long sea-voyage, and while in China he prosecuted medical studies, also aiding Dr. Parker, then in charge of the American Hospital in Canton. On his return home he was graduated, in 1837, M. D. at Dartmouth College. Two or three years later he settled in Savannah for the practice of medicine, and soon after was appointed historian of the State of Georgia, in the discharge of the duties of which position he published "A History of Georgia, from its First Discovery to the Adoption of the Federal Constitution in 1797," two vols., 8vo. Having completed his preparations for orders, he was ordained to the ministry in the Protestant Episcopal Church in 1843, and the next year became Professor of Belles-Lettres and Moral Philosophy in the University of Georgia. In 1848 he was called to the rectorship of St. Andrew's Church, Philadelphia, a position which he filled with great usefulness until his election in 1861, and his consecration, January 2, 1862, as Assistant Bishop of Pennsylvania. On the death of Bishop A. Potter he became bishop of the diocese in July, 1865, and has ever since been busily occupied in the duties of his station. For several years he was in charge of the American Episcopal churches on the Continent of Europe, and in 1878 he attended the Lambeth Conference and preached the closing sermon in St. Paul's Cathedral. Bishop Stevens has published a number of works, in addition to his "History of Georgia"—viz., "The Parables of the New Testament practically Unfolded" (1855), "The Lord's Day, its Obligations and Blessings" (1857), "The Past and Present of St. Andrew's" (1858), "A Charge to the Clergy" (1864), besides numerous single sermons, tracts, etc.

SWEDEN AND NORWAY, two monarchies of Northern Europe, united August 15, 1815. The Constitution of Sweden consists of the law of 1809 on the form of government, the law of succession of 1810, the law of 1812 on the liberty of the press, and the amended statute on the formation of the Diet adopted June 22, 1866. The King must be a member of the Lutheran Church. He has the right to declare war and conclude treaties, and possesses legislative powers in matters of political administration. All other laws are made by the Diet, but must have the assent of the crown. The Diet consists of two Houses, both elective. The First Chamber consists of 187 members, one to every 30,000 inhabitants, chosen for the period of nine years by 25 provincial assemblies and the municipal corporations of Stockholm, Göteborg, Malmö, and Norrköping. The Second Chamber consists of 204 members, elected directly for three years, in the proportion of one member for every 10,000 inhabitants in the towns, and for every rural district of under 40,000 inhabitants, and two for rural districts of more than 40,000 inhab-

itants. The franchise is limited by a property qualification. The executive power is exercised by the King under the advice of a Council of State, consisting of ten members.

The Constitution of Norway, established November 4, 1814, vests the legislative authority in the Storting. The Storting is elected indirectly for three years. Vacancies are filled by the persons receiving the second largest number of votes at the triennial election. The number of members is 114. The King has command of the military and naval forces, and makes all appointments, but must nominate Norwegians. He can veto any measure not of a constitutional character, but if it is passed by three different Storthings it can not be vetoed a third time. The members of the Storting divide themselves into two Houses—the Lagthing, consisting of one fourth of the members, and the Odelsting, composed of the other three fourths. Bills originate in the latter body, and may be rejected by the other, unless the Odelsting calls for a joint sitting, in which case a two-thirds majority of the whole Storting is necessary to enact the measure. The Storting may resolve itself into a court for the impeachment and trial of Ministers, Judges of the Supreme Court, or members of the Storting. Articles of impeachment are passed by the Odelsting, and are tried by the Lagsting and Supreme Court, sitting together. The executive power is exercised by the King through a Council of State, composed of two Ministers and nine Councilors. One of the Ministers and two Councilors reside at Stockholm with the King.

The King of the two monarchies is Oscar II, Fredrik, born January 21, 1829, who succeeded his brother, Carl XV, September 18, 1872. He is the fourth sovereign of the line of Ponte Corvo, which originated with Bernadotte, one of Napoleon's marshals, who was elected Swedish heir-apparent in 1810, and ascended the throne, under the name of Carl XIV Johan, in 1818. The heir-apparent is Oscar Gustaf Adolf, son of the King, born June 16, 1858.

The Swedish Cabinet is composed of the following members: Minister of State, Count Arvid Rutger F. Posse, appointed April 19, 1880; Minister of Foreign Affairs, Baron Carl F. L. Hochschild, appointed April 27, 1880; Dr. Johan H. Lovén, appointed Councilor June 5, 1874; Dr. Nils H. Vult von Steyern, Councilor and Chief of the Department of Justice, appointed April 18, 1880; Baron Carl Gustaf von Otter, Councilor and Chief of the Department of the Navy, appointed April 18, 1880; Fredrik L. S. Hederstierna, Councilor at the head of the Interior Department, appointed April 18, 1880; Dr. Carl Gustaf Hammarskjöld, Councilor in charge of the Department of Ecclesiastical Affairs, appointed August 27, 1880; Councilor Johan C. E. Richert, appointed August 27, 1880; Councilor O. R. Themptander, of the Department of Finance, appointed March 8, 1881; K. A. Ryding, Coun-

cilor in charge of the War Department, who succeeded Otto F. Taube June 16, 1882.

The Norwegian Council of State is composed of the following members: Minister of State, residing at Christiania, Christian A. Selmer, appointed November 1, 1880; Councilor at the head of the Navy and Post-Office Department, Rear-Admiral Jacob Lerche Johansen, appointed June 17, 1872; Councilor in charge of the Department of Justice and Police, J. Helmboe; Councilor in charge of the War Department, Major-General Adolf Frederik Munthe, appointed October 19, 1877; Councilor at the head of the Interior Department, Christian Jensen, appointed October 13, 1879; Councilor in charge of the Department of the Revision of Public Accounts, Dr. O. A. Bachke, appointed October 13, 1879; Councilor in charge of the Department of Education and Ecclesiastical Affairs, N. C. E. Herzberg, who succeeded Jens Helmboe, transferred to the Department of Justice January 30, 1882; Minister of State residing near the King, Otto R. Kiernulf, appointed November 1, 1871; Councilors of the Delegation at Stockholm in 1882, N. Vogt, appointed Councilor May 13, 1871, and C. H. Schweigaard, December 22, 1880.

SWEDEN.—AREA AND POPULATION.—The area of the kingdom is 170,979 square miles, 3,517 of which are covered by the Lakes of Vener, Vetter, Mälär, and Hjelmar. The area, in square kilometres, and population of the Län, or provinces, according to the decennial census of December 31, 1880, were as follow:

LAN.	Area.	Population.
Stockholm, city.....	7,649 }	168,775
Stockholm, district.....		147,021
Upsala.....	5,313	111,019
Södermanland.....	6,341	147,186
Ostergötland.....	10,977	267,183
Jönköping.....	11,574	196,271
Kronoberg.....	9,997	169,736
Calmar.....	11,498	245,105
Göthland.....	8,152	64,668
Blekinge.....	3,010	137,477
Christianstad.....	6,511	220,619
Malmöhus.....	4,795	349,810
Halland.....	4,913	335,299
Göteborg and Bohus.....	5,101	261,114
Elfsborg.....	12,825	258,947
Skaraborg.....	8,561	257,942
Wernmland.....	19,314	268,417
Orebro.....	9,118	182,263
Westmanland.....	6,814	128,491
Kopparberg.....	30,040	190,138
Gefleborg.....	19,515	178,728
Westernorrland.....	25,046	169,195
Jemtland.....	52,218	63,628
Westerbotten.....	59,693	106,435
Norrbotten.....	106,818	90,761
Total.....	440,997	4,565,668

The population was divided into 2,215,243 males and 2,350,425 females. In 1870 there were 3,809 Baptists, Mormons, and Methodists; 190 Reformed, 573 Roman Catholics, 30 Greek Catholics, and 1,836 Israelites; the rest of the population belonged to the established Lutheran Church. There were 6,711 Lapps and 14,932 Finns, born in Sweden, and 12,015 foreigners, principally Germans, Danes, Norwegians,



and Finlanders. The population of the kingdom, according to the annual enumeration made December 31, 1881, was 4,572,245. The number of marriages in 1880 was 28,919, of births 138,303, of deaths 86,794; excess of births over deaths, 51,509.

The mean annual emigration between 1850 and 1860 was 1,690; between 1860 and 1870, 12,245; in the year 1870, 29,003; 1871, 17,450; 1872, 15,915; 1873, 13,580; 1874, 7,791; 1875, 9,727; 1876, 9,418; 1877, 7,610; 1878, 9,032; 1879, 17,637; 1880, 42,109.

The cities containing over 25,000 inhabitants in 1881 were: Stockholm, 176,745; Gothenburg, 78,313; Malmö, 39,512; Norrköping, 27,231.

COMMERCE.—The exports and imports both more than doubled between 1870 and 1880. The chief exports are timber, pig-iron, and grain. The largest imports are textile manufactures, coal, and colonial produce. The total imports in 1880 were valued at 282,788,000 crowns, against 226,442,000 in 1879, having grown from 82,469,000 crowns in 1860; the total exports at 236,643,000 crowns, against 186,164,000 crowns in 1879, and 86,496,000 crowns in 1860. The extent of the commerce with the principal foreign countries was as follows, in crowns, in 1880:

COUNTRIES.	Imports.	Exports.
Great Britain.....	77,743,600	122,810,000
Denmark.....	55,848,000	22,991,000
Germany.....	61,764,000	17,096,000
France.....	6,467,000	28,699,000
Norway.....	16,774,000	7,955,000
Belgium.....	8,705,000	12,268,000
Russia.....	17,454,000	2,012,000
Netherlands.....	8,384,000	6,139,000
United States.....	11,770,000	2,869,000
Finland.....	8,778,000	5,089,000

Of 9,618 laden vessels, of 1,513,395 tons, entering Swedish ports in 1880, 5,216, of 762,442 tons, bore the Swedish flag; 647, of 123,456 tons, the Norwegian; and 3,755, of 627,497 tons, were foreign vessels. The merchant navy consisted, in 1880, of 2,252 vessels, of 105,062 tons, including 607 steamers, of 31,509 tons, engaged in domestic commerce, and 2,133 vessels, of 455,631 tons, including 165 steamers, of 55,089 tons, trading abroad.

There were 3,860 miles of railroad in operation at the commencement of 1882, of which 1,370 miles belonged to the state and 2,490 miles to companies.

The number of post-offices in 1880 was 1,785. There were 38,078,616 letters and postal-cards, 3,699,789 printed inclosures, and 26,952,716 newspapers forwarded in 1881; together 68,731,121, against 63,709,363 in 1880.

The length of telegraph lines in 1881 was 5,225 miles; length of wires, 12,795 miles. The number of dispatches sent was 1,118,081, comprising 591,276 domestic, 398,534 international, and 128,271 in transit. The receipts were 1,304,495, the expenses 1,205,966 crowns.

ARMY AND NAVY.—There are five different

classes of soldiers. The enrolled troops (Värfvade) and the cantoned troops (Indelta) form together the regular army. The first are recruited by enlistment. The latter class receive, partly from private landholders and partly from the crown domains, a house and parcel of land, and annual pay in money or in kind. The third class is the conscripted troops (Beväring), in which every able-bodied young man is enrolled; but only a part of them are instructed. There are besides two special bodies, the Gotland militia, which is not obliged to serve outside of the island, and the volunteer rifle association, which numbered 11,065 men in 1881. The regular army in 1882 numbered 35,106 men, exclusive of officers. The enrolled troops numbered 2,230 infantry, 1,066 cavalry, 4,343 artillery, and 894 engineers, together 8,533 men; the cantoned troops, 23,016 infantry and 3,557 cavalry, together 26,573 men. The strength of the conscripted army was 135,337; of the Gotland militia, 7,762.

The navy consisted, in 1882, of forty-four steamers, with 155 guns, including one line-of-battle ship, one frigate, four corvettes, four monitors, ten small monitors, two torpedo-boats, and nineteen gunboats. The four monitors and ten of the gunboats were ironclads. There were besides five sailing-corvettes and five brigs, carrying 105 guns.

FINANCES.—The budget for 1883 makes the total ordinary receipts 20,590,000 crowns (by a treaty signed May 27, 1873, and the supplementary treaty of October 16, 1875, Sweden, Norway, and Denmark adopted a common decimal monetary system: the Swedish krona, Norwegian and Danish krone, is equivalent to 26·8 cents), derived from the land-tax (5,995,000 crowns), domain farms (2,900,000 crowns), capitation tax (640,000 crowns), tonnage dues (1,200,000 crowns), net railway receipts (6,200,000 crowns), gross telegraph receipts (1,330,000 crowns), gross receipts from forests (1,000,000 crowns), and miscellaneous sources (1,325,000 crowns); the total extraordinary receipts, 53,770,000 crowns, derived from customs duties (27,500,000 crowns), postal receipts (5,100,000 crowns), stamps (3,000,000 crowns), spirit-tax (17,000,000 crowns), beet-sugar impost (70,000 crowns), and income-tax (4,100,000 crowns); the net receipts of the Bank of Sweden, 1,600,000 crowns; unexpended balance, 2,789,137 crowns; total receipts of the Treasury, 78,749,137 crowns. The ordinary expenditures are fixed at 58,536,711 crowns: 1,338,000 for the royal household, 3,753,000 for the Department of Justice, 613,800 for that of Foreign Affairs, 17,205,000 for that of the Army, 5,375,000 for the Navy Department, 4,396,360 for that of the Interior, 10,132,551 for that of Education and Worship, 2,430,000 for pensions, and 13,293,000 for financial administration. The extraordinary expenditures are placed at 7,827,589 crowns: 2,413,000 for the army and navy, and 5,414,589 for other purposes. The expenditures on account of the

public debt are set down as 10,187,932, and the balance to be carried over as 2,196,905 crowns, which makes the budget of expenditures balance the total receipts. The army and the ecclesiastical establishment are maintained mainly from the produce of the domainial estates, which are not entered in the budget, nor are the 304,700 crowns contributed for foreign affairs by Norway. The cost of education is defrayed in great part out of the communal and provincial revenues.

The public debt of Sweden was contracted entirely for the construction of railroads. The total amount outstanding on January 1, 1882, was 234,715,896 crowns. Of this 34,843,500 consisted of the internal loans of 1870 and 1872, at 5 and 4 per cent interest respectively; 190,872,396 crowns was the amount of the foreign loans contracted at 4½ and 5, and latterly at 4 per cent interest, in England, Germany, and France, the last of which was raised in 1880, and amounts to 70,785,000 crowns; and 9,000,000 crowns constitute an unfunded loan of 1879, repayable before November 1, 1885.

LEGISLATION.—The Swedish Diet separated May 22d, after a session of four months' duration. The great questions of the regulation of the land-tax and the reorganization of the army have been before the country many years. A number of ministries have been shipwrecked in the effort to effect these reforms, which are intimately connected with one another. The present ministry proceeds more cautiously with the army reform. The development of a military force upon modern models of the most modest proportions would require a considerable augmentation of the revenue, of which there is no prospect. The present organization is sufficient to permit a military demonstration with 20,000 men, which will meet every requirement, as Sweden has little to fear from its neighbors. The military and naval items in the budget were voted, with the exception of that for continuing the fortifications at Carlsborg, which was considerably reduced. The more important subject of the readjustment of the land-taxes, which press very unequally upon the small owners, is dealt with only in vague promises. The Posse Ministry is a business Cabinet, which offers no political programme. It commands no firm majority in the Diet, but in its conservative course, while the resources of the country are slowly developing, it obtains a support from all parties, though the rural party, from which the Prime Minister came himself, opposes many of his financial measures as extravagant. The committee on the national defense developed a plan in December, by which the regular army would be increased to 25,000 men, and a reserve maintained which would furnish a total war effective of about 75,000 men for the field army. The Diet rejected by a considerable majority the proposition to introduce corn duties. A resolution in favor of extending the right of suffrage was passed by a decided ma-

jority in the Second Chamber, but was rejected by the First Chamber.

NORWAY.—AREA AND POPULATION.—The area of Norway is 122,869 square miles. The total population, according to the last decennial census, taken December 31, 1875, was 1,806,900, divided into 876,762 males and 930,138 females. The town population was 326,420; rural population, 1,480,480. The population in 1880 was estimated at 1,913,500. The number of marriages in 1880 was 12,585; of births, 58,862; of deaths, 30,532; excess of births, 28,330. Besides the Norwegians proper, there were, in 1875, 7,594 Finns, 14,645 settled Lapps, 1,073 nomad Lapps, and 8,396 of mixed blood. The number of foreign-born residents was 37,350, of whom 29,340 were Swedes, and the rest chiefly Finlanders, Danes, and Germans. Besides the adherents of the state Church, there were 2,759 Methodists, 1,184 Reformed Lutherans, 819 Baptists, 542 Mormons, 502 Roman Catholics, 432 Quakers, and 1,000 of other denominations. The following cities contained over 20,000 inhabitants; Christiania, 76,054; Bergen, 34,388; Trondhjem, 22,544; Stavanger, 20,288. The emigration for the last ten years, reported, was as follows: 1871, 12,276; 1872, 13,865; 1873, 10,352; 1874, 4,601; 1875, 4,048; 1876, 4,355; 1877, 3,206; 1878, 4,863; 1879, 7,608; 1880, 20,212.

COMMERCE.—The average value of the total imports in the years 1876-80 was 161,300,000 crowns; of the exports, 102,300,000 crowns. The staple exports are timber and wood, fish, and, in smaller quantities, pig-iron and copper-ore. The total imports in 1881 amounted to 164,997,000 crowns; in 1880, 150,871,000 crowns. Total exports in 1881, 120,934,000 crowns; in 1880, 108,739,000 crowns. The largest trade in 1881 was with the following countries:

COUNTRIES.	Imports.	Exports.
Great Britain .....	42,876,000	40,886,000
Germany .....	45,225,000	16,460,000
Sweden .....	15,281,000	13,823,000
Denmark .....	20,251,000	6,556,000
France .....	9,740,000	8,302,000
Russia .....	9,979,000	6,197,000
Spain .....	2,953,000	12,391,000
Holland .....	6,624,000	7,800,000

The imports from the United States in 1881 were 2,929,000 crowns in value, and the exports to the United States 62,000 crowns.

The number of arrivals in Norwegian ports in 1880 was 11,556 vessels, of 1,971,209 aggregate tonnage, of which 6,703 vessels, of 1,337,294 tons, were Norwegian, and 5,688, of 982,096, or less than half, with cargoes. Norway has the largest merchant fleet, in proportion to her population, of any country. The number of vessels at the end of 1880 was 8,095, against 6,993 in 1870; the aggregate registered tonnage, 1,518,658, against 1,007,908; the number of sailors employed, 60,832, against 49,337.



The steam fleet consists of 334 vessels, of an aggregate tonnage of 58,062 tons.

The length of railroad lines in operation at the end of 1882 was 950 miles.

The telegraphs, as in Sweden, belong to the state. The length of the lines at the end of 1881 was 4,705 miles; of wires, 8,550 miles. The number of internal dispatches was 498,024; received from abroad, 188,731; sent abroad, 160,433; in transit, 24; total, 847,212. The receipts were 967,608 crowns; expenses, 965,431 crowns. There were besides 725 miles of railroad lines, with 1,455 miles of wire.

The number of post-offices in 1881 was 938. The number of letters forwarded was 11,013,340 domestic, and 15,544,789 including the foreign; the number of newspapers, 12,465,530. The receipts amounted to 1,804,070 crowns, the expenses to 1,852,728 crowns.

**ARMY AND NAVY.**—By the laws of 1866 and 1876, the military forces are divided into the line troops, the *landværn* or militia, the train, and the landstorm or final levy in mass. The army of the line numbers 750 officers and 18,000 men, which number can not be exceeded even in war-time, without the assent of the Storting. It is raised principally by conscription. The *landværn* is not liable to service beyond the borders.

The naval forces are recruited mainly by enlistment, but in default of volunteers are completed by conscription among the sailors. The navy consisted in July, 1882, of thirty-seven steamers, carrying 152 guns, including four iron-clad monitors, two frigates, two corvettes, a ram, and twenty-eight gunboats of different classes.

**FINANCES.**—The ordinary receipts of the Treasury amounted in the year ending June 30, 1881, to 34,618,100 crowns. The extraordinary receipts, consisting of loans and local contributions for the construction of railroads, raised the total receipts of the Treasury to 41,630,000 crowns. The gross revenue from customs was 15,858,100 crowns; from the liquor-tax, 3,500,800; from the malt-tax, 2,251,000; from railroads, 3,671,000; from posts, 1,713,600; from mines and domains, 1,128,600. The heads of expenditure were: 9,394,700 crowns for financial administration; 6,580,100 for the army; 6,377,900 for the navy, posts, and telegraphs; 4,981,300 for the Interior Department, including the operation of the railroads; 4,111,600 for justice, police, and sanitary service; 2,970,200 for the university and other expenses of the Department of Instruction and Worship (not including about 1,000,000 crowns derived from special funds); 1,141,300 for the Council of State and Ministries; 408,500 for the Storting; 435,400 for the civil list and appanages; 499,700 for foreign affairs; and 94,500 for incidental expenses. The outlay of 6,234,400 crowns on railroads brings the total expenditures up to 43,681,800 crowns.

The total amount of the public debt outstanding on June 30, 1881, was 104,512,000

crowns, all bearing 4½ per cent interest, except a loan contracted in 1880 at 4 per cent. Against the debt the Government holds assets which nearly offset the entire amount. These consist of productive funds, administered by the Department of Finance, amounting to 29,700,000 crowns, cash and credits amounting to 5,200,000 crowns, and railroad shares to the amount of 62,900,000 crowns—together, 97,800,000 crowns.

**POLITICS AND LEGISLATION.**—The republican movement in Norway assumed during the year 1882 larger proportions than at any previous time, the struggle between the King on the one side and the Storting or national Parliament on the other culminating in a rebuke of the former. The union of Sweden and Norway dates back to 1814, when King Charles XIII received Norway from the allies as the price of his assistance in the war against Napoleon. According to the Constitution of Eidsvold, adopted November 4, 1814, Norway was declared "free, independent, indivisible, and inalienable." This Constitution gave to the country a form of government virtually republican. Under a monarchical form, Norway is really a republic of peasants, in which the aristocracy of other monarchies is represented by a strong peasantry. The King can not dissolve the Storting until it has been in session three months; and, though he may veto a measure, his veto may be overruled by the action of three successive Storthings. Its foreign representation is united with that of Sweden, but its army is not, the Constitution providing expressly that Norwegian troops are not to be taken out of the country without the consent of the Storting, while the same consent is necessary to bring Swedish or foreign troops into Norway. Conflicts between the King and the Storting occurred almost from the very time of the union. King Charles John XIV, who ascended the throne in 1818, made many unavailing attempts to reduce the country to closer submission to royal authority. The present conflict began in 1872, when the Storting carried by a vote of 80 to 29 a bill inviting the ministers to be present at the meetings of the Storting as is the case in other constitutional countries. The King refused his sanction to this bill, but it was passed by two successive Storthings, and had, therefore, as its friends claimed, become a law.

But the King again refused his sanction, and a new struggle arose on the nature of the King's veto. On June 9, 1881, the Storting declared the bill, thrice carried by the legal majority, to be valid law in the kingdom of Norway. The resolution was met by a firm protest from the crown. The crown's claim for an absolute veto has been pushed further. Lately it was employed to frustrate the permanent sitting, the Storting's appointment of a parliamentary committee, and even some of its financial bills. The other reforms of the liberal programme—such as the introduction of

juries, a reasonable extension of the right of suffrage, a reorganization of the army on the model of the Swiss system of militia—are all met by an unyielding resistance on the part of the Government, and as little regard is paid by the Peasant party to guarantees claimed by the crown. The political excitement during the preparations for the new elections was very intense. A speech of the poet Björnsterne Björnson, one of the leaders of the Peasant party, clearly shows the ideas entertained by this party. He said: "If any one, even were he a minister, should say that royalty can not do without the veto, we would have to answer most emphatically, that in such a case the Norwegian people would have to give up royalty. The issue of this election can be nothing less than the veto or royalty." The new elections returned to the Storting a more formidable majority of the Peasant party than ever, and in the new Storting, which meets in February, 1883, all the means placed in their hands by the Constitution will be used by them to maintain their will. The proposition to increase the appanage of the Crown Prince, on the occasion of his marriage, was rejected for the second time in June. A new commercial treaty was concluded with France, which went into force May 15th. The duties on artificial flowers, silk fabrics, gloves, watches, wine, and on feathers, sardines, and anchovies, were considerably lowered.

SWITZERLAND, a federal republic in Central Europe. A closer union was formed under the fundamental laws adopted in 1848, and the Constitution of April 19, 1874. The legislative and executive authority of the confederacy is vested in the State Council, or *Ständerath*, composed of 44 members, chosen by the twenty-two cantons, two for each canton, and the National Council or *Nationalrath*, chosen by direct election at the rate of one member for every 20,000 inhabitants. Every male citizen over twenty years of age is a voter. Clergymen are not eligible. Both Chambers united form the National Assembly. The executive authority is delegated to the *Bundesrath*, or Federal Council, consisting of seven members, chosen for three years by the Federal Assembly. The President and Vice-President of the Federal Council are elected by the Federal Assembly for the term of one year, and are not eligible for the next consecutive term. The seven members of the Council preside each one over a separate department of the administration. The *Bundesgericht*, or Federal Tribunal, decides upon questions in dispute between the cantons among themselves, or with the Federal Government. It consists of 11 members, elected for six years by the Federal Assembly. The Federal Tribunal is also the court of final resort for all cases. The Federal Assembly sits at Bern, the Federal Tribunal at Lausanne.

The cantons have their local government, based upon the principle of the direct sov-

eighty of the people. In the smaller cantons, as in Appenzell, Glarus, Unterwalden, and Uri, the laws are passed by the full vote of the citizens, meeting at stated periods in open-air assemblies. In others the acts of the legislative bodies are submitted to the people for confirmation or rejection. In the more populous cantons the legislative authority is delegated to the Cantonal Great Council, chosen by universal suffrage.

The acts of the Cantonal Councils and of the Federal Assembly are subject to the veto of the people, when a *referendum* or reference to the popular vote is demanded by a certain number. Federal laws are submitted to the popular vote when demanded by 30,000 citizens, or by eight cantons.

The President of the Federal Council for 1882 was S. Bavier, of the canton of Grisons; the Vice-President was L. Ruchonnet, of the canton of Vaud. The members of the Council and their departments were as follow: Politics, S. Bavier, the President; Interior, Dr. K. Schenck, of the canton of Bern; Justice and Police, L. Ruchonnet, the Vice-President; Military Affairs, F. W. Hertenstein, of the canton of Zürich; Finance and Customs, B. Hammer, of the canton of Soleure; Commerce and Agriculture, N. Droz, of the canton of Neuchâtel; Posts and Railways, Dr. E. Welti, of the canton of Aargau.

AREA AND POPULATION.—The population of Switzerland, as determined by the census of December 1, 1880, was 2,846,102, divided into 1,394,626 males and 1,451,476 females. The area in square kilometres, and the population of each of the cantons and half-cantons into which the confederacy is divided, with the number of Protestants and Roman Catholics in each, and of persons speaking the German, French, and Italian languages, are shown in the table on the following page.

The number speaking the Roumansch language is 38,705, of whom 37,794 live in Graubünden. There were 6,675 speaking other languages than those enumerated. The number of foreigners returned was 211,035, of whom 95,253 were Germans, 53,653 French, 41,530 Italians, 12,859 Austrians, 2,812 British, 1,285 Russians and Poles, and 1,111 Americans. The number of Israelites was 7,373; of persons of other faiths than the above, 10,838. The number of marriages in 1881 was 19,425; of births, 88,503; of deaths, 67,341; excess of births, 21,162.

The population live mostly in small towns and villages. The only towns with over 25,000 inhabitants, in 1880, were the following: Geneva, 68,320; Basel, 61,399; Bern, 44,087; Lausanne, 30,179; Zürich, 25,102. Geneva is the seat of the watch and jewelry industry, and Basel, of silk and other manufactures. The soil is very equally divided, there being but half a million of the two and a half million inhabitants of Switzerland who possess no property or heritage in land. Of every 100



CANTONS.	Area.	Population.	Protestants.	Catholics.	German.	French.	Italian.
Zürich.....	1,724	817,576	288,184	50,298	818,762	1,471	1,886
Bern.....	6,889	582,164	463,163	65,828	452,089	78,640	1,055
Lucerne.....	1,560	184,806	5,419	129,172	184,165	802	294
Uri.....	1,076	23,694	524	28,149	18,024	282	5,313
Schwyz.....	908	51,235	954	50,266	49,631	146	1,877
Unterwalden, Upper.....	474	15,356	277	15,075	15,254	9	88
Unterwalden, Lower.....	290	11,992	90	11,901	11,869	28	98
Glarus.....	691	84,218	27,097	7,065	83,995	27	124
Zug.....	289	22,994	1,218	21,784	22,592	120	219
Fribourg (Freiburg).....	1,669	115,400	18,188	97,113	85,705	79,816	324
Soleure.....	783	80,424	17,114	63,087	79,514	764	91
Basel, town.....	35	65,101	44,236	19,288	62,644	1,901	388
Basel, country.....	421	69,271	46,670	12,109	58,961	217	72
Schaffhausen.....	294	38,348	38,897	4,154	38,117	149	89
Appenzell, Exterior.....	260	61,968	8,694	51,742	47	125	16
Appenzell, Interior.....	159	12,841	545	12,394	12,821	2	960
St. Gallen.....	2,019	210,491	83,441	126,164	208,718	876	129,409
Graubünden (Grisons).....	7,184	94,991	63,168	41,711	43,664	115	12,976
Aargau.....	1,404	198,645	108,029	88,898	197,862	866	801
Thurgau.....	988	99,552	71,821	27,128	99,026	205	287
Ticino (Tessin).....	2,818	180,777	858	180,017	1,054	212	129,409
Vaud (Waadt).....	3,222	288,730	219,427	18,170	21,692	212,164	2,518
Valais (Valais).....	5,247	100,216	866	99,316	67,214	1,018	1,846
Neuchâtel.....	807	103,732	91,076	11,651	24,489	77,525	1,346
Genève.....	279	101,595	48,359	51,557	11,500	86,414	2,199
Total.....	41,889	2,846,102	1,667,109	1,160,782	2,080,792	608,007	161,928

square miles 20 are pasture-land, 17 forest, 11 arable, 20 meadow, 1 vineyard, and 30 uncultivated, including lakes, mountains, and rivers.

Emigration was formerly considerable. It declined for several years, but has recently assumed larger proportions than ever, owing to the stringency of the military service, and the agricultural attractions of the United States. Between 1868 and 1875 the average annual emigration was 5,170. In 1876 the number of emigrants was 1,741; in 1877, 1,691; 2,608, in 1878; 4,257, in 1879; 7,255, in 1880; and in 1881, 10,935. Of the latter number 9,996 emigrated to North America.

COMMERCE.—The value of the exports and imports is not published by the custom-house authorities. All merchandise is classified under the heads of goods taxed by weight, *ad valorem* goods, or live-stock. The imports consist chiefly of articles of food; the exports of cotton and silk manufactures, watches, straw hats, and machinery. The importation of live-stock, in 1881, was 254,997 head, the exportation, 106,296. Nearly all other articles are measured in quintals. The commerce with the adjacent countries in the classes of goods taxed by the quintal was, in 1881, as follows, in metric quintals, of 220 pounds avoirdupois:

COUNTRIES.	Imports.	Exports.
France.....	6,148,414	959,895
Germany.....	11,208,579	1,187,501
Austria.....	1,708,571	248,197
Italy.....	859,727	219,090

The principal exports in 1879 consisted of 84,000 quintals of silk fabrics, 347,280 of cotton manufactures, 1,532 of watches, and 106,193 of machinery, besides the exports of cheese and other articles of food.

The railroads open to traffic in the beginning of 1881 had a length of 1,600 miles, or over one mile to every ten square miles of surface.

There were thirteen companies. The total

capital invested was 962,165,525 francs; the cost of construction, 747,350,802 francs; the number of passengers conveyed in 1880, 21,608,581; merchandise transported, 5,817,008 tons; receipts, 60,020,371 francs, of which 23,880,719 was from passengers and 31,706,747 from freight; operating expenses, 31,497,203 francs.

The length of the state telegraph lines at the beginning of 1882 was 4,140 miles; of wires, 10,100 miles. The number of domestic messages was 1,837,385; of international, 879,727; dispatched and received, in transit, 329,798; official, 83,079; total, 3,129,989. The receipts were 2,453,972 francs; the expenses, 1,963,666 francs.

The number of post-offices in 1881 was 803; the number of letters carried, 80,751,538, of which 24,530,310 were foreign; the number of newspapers sent from Switzerland and Germany, 51,472,806; arrived from Germany and Austria, 1,171,913; number of passengers on postal coaches, 829,269; receipts, 15,998,837 francs; expenditures, 13,964,554 francs.

The most remarkable feature of the Swiss post-office is the large amounts of money it transfers in money orders, and the numbers of packages and boxes it forwards. The money orders in 1881 amounted to over 240,000,000 francs. There were about 12,500,000 small parcels received and delivered within the limits of the Confederation, and 11,000,000 received from or forwarded to foreign countries. There were, moreover, 6,806,901 boxes and large packages distributed.

According to the returns of the Universal Postal Union at Bern, the countries constituting the Union received and dispatched 3,866,000,000 letters, 649,000,000 ordinary postal-cards, 1,000,000 postal-cards with answers prepaid, 1,983,000,000 newspapers, 1,098,000,000 printed inclosures, 64,000,000 samples, and 98,000,000 small parcels. The amount of money paid in post-office orders aggregated

over \$1,600,000,000. There were 3,418,000,000 letters delivered in Europe; 1,246,000,000 in America; 75,000,000 in Asia; 36,000,000 in Australia, and 11,000,000 in Africa, making 3·5 letters for every inhabitant of the earth, according to the returns of the Postal Union, and those of countries not yet forming a part of the Union.

**ARMY.**—The Federal army is composed of the regular army (*Bundesanzug*), to which all are liable between the ages of twenty and thirty-two, and the reserve (*Landwehr*), which comprises all the male citizens between thirty-three and forty-four years of age. The strength of the regular army on the 1st of January, 1882, was 115,754; of the reserve, 92,178 men; together, 208,216 men.

**FINANCES.**—The total receipts of the Federal Treasury, in 1881, were 43,383,026 francs, of which 655,568 were derived from public property, 214,708 from capital at interest, 17,436,496 from customs, 15,998,837 from posts, 2,496,039 from telegraphs, 1,274,084 from the mint, 1,705,981 from the military administration, principally the half of the military tax accruing to the Federal Treasury, 3,243,378 from the Federal laboratory, powder-factory, and other monopolies, and 357,935 from other sources. The total disbursements were 42,717,493 francs, of which 1,870,583 were for interest and repayments, 816,522 for the general cost of the Government, 4,845,603 for the departments, 12,614,971 for the army, 14,129,741 for the post-office, and 8,440,073 for the telegraphs, mint, laboratory, and other purposes.

The budget for 1882 makes the total receipts 41,929,000 francs, and the total expenditures 42,294,000 francs.

The combined net receipts and expenditures of the cantons and those of the Federal Government, for 1876, are shown in the following summary, giving the amounts in francs:

NET RECEIPTS.	Cantons.	Confederation.	Total.
Forests .....	2,061,518		2,061,518
Domains .....	1,011,446	102,559	1,114,005
State Industries .....	593,676		593,676
Monopolies .....	4,147,474	804,843	4,952,317
Direct taxes .....	16,454,239	965,764	17,420,003
Indirect taxes .....	15,037,268	15,845,955	30,883,223
Miscellaneous .....	437,805	20,562	458,367
<b>Total .....</b>	<b>39,743,726</b>	<b>17,239,733</b>	<b>56,983,459</b>
<b>NET EXPENDITURES:</b>			
Interest and repayments ..	3,007,420	1,220,046	4,227,466
Legislation and administration .....			
Military .....	3,673,652	1,275,219	4,948,871
Justice .....	2,163,408	12,606,889	14,776,297
Prisons .....	2,779,666	183,183	2,962,849
Police .....	1,080,187		1,080,187
Sanitary affairs .....	2,697,822	17,773	2,715,595
Agriculture, commerce, etc.	258,977	642	259,619
Finances .....	1,584,104	888,232	1,917,326
Public Works .....	889,909	816,197	1,206,106
Education, arts and sciences	11,173,406	1,789,419	12,962,825
Worship .....	8,898,009	888,384	9,286,343
Public charities .....	3,121,991		3,121,991
Miscellaneous .....	2,508,543	15,000	2,523,543
<b>Total .....</b>	<b>44,103,073</b>	<b>18,303,499</b>	<b>62,406,572</b>

The debt of the Confederation amounted on the 31st of December, 1881, to 36,947,044 francs, and the assets to 52,939,752 francs. The aggregate cantonal debts, in 1877, amounted to 252,793,373 francs, and the aggregate assets to 456,267,202 francs. All of the twenty-five cantons and half-cantons except seven had assets in excess of their liabilities. The excess in both Bern and Zürich was over fifty million, and in Aargau over twenty-five million francs.

A new commercial treaty was concluded with France, after some delay, owing to the demands of the French protectionists. The trade with France is large and important, especially to the Swiss dairy interest. The exports of Swiss cheese to France rose from 600,000 francs in 1856 to 8,500,000 francs in 1881, corresponding to a weight of 55,000 metric quintals. Conventions were arranged with France also on the subjects of the residence of the citizens of one country in the other, and the protection of literary and artistic property, and of trade-marks. The opening of the St. Gothard Tunnel and the project of a new Franco-Swiss railroad are described elsewhere.

**FOREIGN RELATIONS.**—The Swiss Government, which took the lead in furthering the Postal Union, the Red-Cross Association, and similar humane and utilitarian international projects, proposed in 1882 two new subjects for international agreement. One was a common basis of factory legislation. This was rejected by the various governments—by the German, because factory laws were considered a matter of internal moment; by the French, because it did not wish to be bound in this question by international regulations; by the British, on the ground of the unequal industrial conditions of different countries; and by the Austrian and Italian, because the basis of common legislation was not elucidated in the proposal of the Federal Council. The second proposition was for an international standard of fineness for the precious metals, and reciprocal recognition of the official inspection of each country. This was rejected by all the European governments.

**POLITICS AND LEGISLATION.**—The elections of November, 1881, gave the Radical party a majority in the National Council. This party, opposed by the aristocratic and clerical elements in the French and Italian cantons and by the German party in German Switzerland, does not represent an absolute majority of the nation. In consequence, the right of the *referendum* was exercised in 1882, to an extent which makes the efforts of the last generation to establish a national government in the place of the former loose confederation of semi-independent states appear fruitless, and the National Assembly a useless institution, since its decisions are always overturned by the *plébiscite*. The most important question which has exercised Switzerland in recent times is that of national defense. It was the growth



of enormous armaments in the great nations contiguous to Switzerland which first impelled her people to determine upon a real national union in 1848, which remained an empty declaration until the adoption of the Constitution of 1874. The preservation of the popular veto as a safeguard against excessive centralization, and as embodying the Swiss principle of popular sovereignty manifested in its primitive form in the *Landsgemeinden* of the small cantons where the whole body of the people deliberates upon the laws, entirely frustrates the intentions of the Constitution, when exercised as in 1882 to annul the laws of the national Government simply because they emanate from central authorities. A scheme for national fortifications was elaborated by a commission of experts. Its main points were suggested by Colonel Frei, of Basel, who in 1882 received the appointment of Minister to Washington. Colonel Frei is specially fitted for his present post, as he formerly resided in the United States, and fought on the side of the North in the American war. He was taken prisoner and was confined in Andersonville Prison, where he came in contact with the notorious keeper, Wirtz, also a Switzer, from Zürich. The projected fortifications were to be erected on the French frontier, where roads, railroads, and fortresses have been erected by the French Government in recent years, presumably for the purpose of an inroad into Germany through Switzerland, in the case of another German war. The objections to the plans of the military engineers were not merely the cost, but the suspicions of France which they implied,

to which country the Radical-Liberal party is bound by sympathetic ties. The fortification project is consequently postponed.

The rejection by a *plébiscite* of a reform in the military service law indicates the attachment of the Swiss people to their old militia system and their opposition to centralization. Their repugnance to the burdens of a centralized, military state is manifested in the increasing emigration to America, and the yearly decline in the military recruit and in the effective strength of the Federal army. The national Legislature passed in 1882 a law making vaccination compulsory. The anti-vaccinationists, who are more zealous than numerous, obtained the necessary 30,000 names to a memorial demanding a *referendum*. When the question came to a vote, the law was vetoed by a large majority, although in several of the cantons vaccination was already compulsory by acts of the local Legislatures, to the general satisfaction of the people who voted against the national measure.

The question of public education, which agitated all Catholic and in a less degree Protestant countries also, came up for final solution in 1882. The law which was passed by the Nationalrath, introducing compulsory secular education, carries out a provision of the Federal Constitution to that effect. The Catholics and a section of the Protestants demanded a *plébiscite* on this law, and obtained the necessary number of names to the memorial with ease; but the popular vote sustained the act of the Legislature by a large majority.

## T

TAIT, ARCHIBALD CAMPBELL, D. D., D. C. L., Archbishop of Canterbury, and Primate of all England, born in Edinburgh, December 22, 1811, died in London, December 3, 1882. His early education and training were received in the Edinburgh Academy and University of Glasgow. In 1830 he went to Oxford, where he entered Balliol College. His university career was more than ordinarily brilliant and satisfactory. He took the degree of B. A. in 1833, and obtained a first in the school of *Literae Humaniores*. Soon after he was elected Fellow of his college, and in due time became Tutor and Dean, taking his M. A. degree in 1836. He was also appointed select preacher in 1843, and his success as a tutor and lecturer, especially in logic, was far beyond the average. He aided materially in placing Balliol College in the front rank of the colleges at Oxford. His habit of doing all his work in the very best manner and to the extent of his ability, and his practical good sense, fairness, and earnest desire to oblige and benefit all with whom he had dealings, made him numerous friends, whose regard and esteem he never lost. In 1841 he was one of the

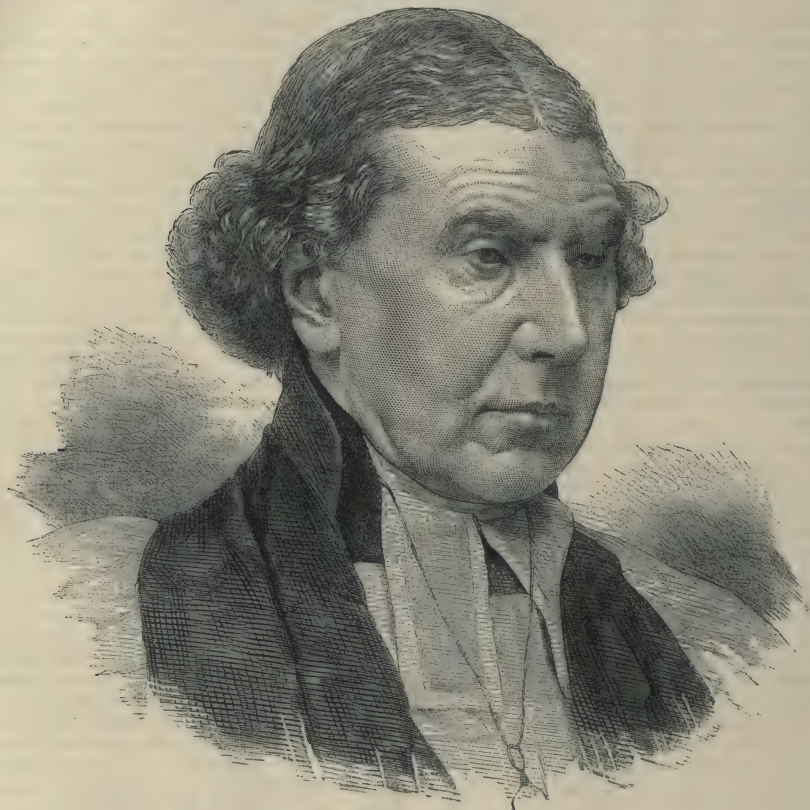
"Four Tutors" who publicly protested against Tract No. 90, and the whole system of interpretation of the articles and standards of the Church of England, which John Henry Newman and the Tractarian School were then urging with great power and effect. As Mr. Tait left the university the next year, he took no further active part in this controversy.

In the summer of 1842, by the death of Dr. Arnold, of Rugby, the head-mastership of the school became vacant, and though the candidates for the succession were numerous, and some of them were men of mark and influence, the lot fell upon Tait. His success, in following so popular and so able a man as Arnold, was remarkable, and proved again his good sense and possession of qualities of a high order. In 1843 he was married to Miss Catharine Spooner, daughter of Archdeacon Spooner, a lady who proved in every sense of the word a "helpmeet" to him in his varied career and high positions in the Church. His married life was one of happiness and peace, notwithstanding the severe afflictions which came upon him in the loss of five young daughters by scarlet

fever, at Carlisle, in the spring of 1856, and subsequently of his only son, Crawford, who died, after a lingering illness, in 1878.

The active zeal and diligence of Dr. Tait at Rugby began to tell seriously upon his health and strength, and it was intended to give him an opportunity for rest and recreation that he was appointed to the deanery of Carlisle in 1851. But his principles allowed no such course as cessation from labor; and so diligent

the sum of \$5,000,000. This money was appropriated to the erection of churches, schools, and parsonages in the poorer suburbs of London; above seventy new districts have become separate and endowed parishes; and Scripture readers in large numbers, as well as women devoted to mission work, besides a large accession of working clergy, have done and are doing something, at least, toward supplying the spiritual wants of the masses.



ARCHIBALD CAMPBELL TAIT, D. D., D. C. L.

was he in the discharge of the duties of his office—in preaching, in visiting the poor, in looking after the public charities of the town—that, when a bishop was wanted for the great diocese of London, Dr. Tait was placed in it, in 1856, at the direct suggestion of Queen Victoria. His labors in this new sphere were abundant and unceasing. He felt deeply the need of endeavoring to do something more than had as yet been accomplished for the myriads of the poor in the vast metropolis, and he gave his whole soul to the work. So successfully did he urge upon the wealthy classes their duty in this matter, that, in the course of ten years, the “Bishop of London’s Fund” was raised to

On the death of Archbishop Longley, in 1868, Dr. Tait was appointed his successor. He had been offered the archbishopric of York some years before, but declined this elevation, preferring to remain and carry on the work undertaken in London under his auspices. He was the first Scottish-born Archbishop of Canterbury, and his appointment was due, beyond doubt, mainly to the Queen. The first measure of importance in which he was called upon to take part, in his new position, was that of the disestablishment of the Irish Church, in 1870. The political necessity of this measure he felt and acknowledged, while at the same time he worked with others in striving to secure to the



church people in Ireland all the benefits possible under the changed state of things caused by disestablishment. In 1870 he was relieved of some of his heavy duties by the appointment of Dr. Parry as suffragan Bishop of Dover, and he visited Italy for the benefit of his health. He presided over the Pan-Anglican Synod at Lambeth, in 1867; the Church Congress at Croyden, in 1877; and the Conference of Anglican Bishops in 1878. Mrs. Tait died in 1878, and the effect upon the archbishop was extremely depressing. His chief publications were: "Charges to the Clergy," in the years 1858, 1862, and 1866; "The Dangers and Safeguards of Modern Theology," sermons, etc., in 1861; "The Word of God and Ground of Faith," eleven discourses, 1863, 1864; separate sermons, addresses, etc., at different times, together with articles in the "Edinburgh Review" and "North British Review." His latest publication was "The Church of the Future," a diocesan charge delivered to rural deaneries, in August and September, 1880.

**TARIFF REVISION.** The existence of a large surplus revenue, the consequent tendency to extravagant expenditures, the rapid redemption of Government bonds, which form the basis of the national currency, and a growing conviction that the industrial and commercial interests of the country are oppressed and deranged by heavy taxation, have in the last two years produced a rapidly increasing agitation in favor of a thorough revision of the tariff laws of the United States. The effect was felt at the session of Congress which met in December, 1881, but political sentiment was so divided on the subject that it was evidently impossible to secure agreement on any careful measure of reform. The Republican party had a controlling majority in the House of Representatives, in which revenue measures originate, and, while it had no clearly defined position regarding the tariff, the preponderating sentiment was in favor of preserving, so far as possible, the protective features of the existing law. The Democrats were in a general way pledged to reform, and a tariff for revenue only, but among them there were wide differences of opinion, some being as strongly attached to protective doctrines as any of the opposing party. The need of reducing the revenue was acknowledged on both sides, and the demand for a revision of the tariff was recognized, but there was no chance of agreement on any practical measure. The result of prolonged discussion was the reference of the question of tariff revision to a commission, and an unsuccessful effort to pass a bill to remove or reduce certain of the internal revenue taxes. (See CONGRESS.)

**THE TARIFF COMMISSION.**—The Tariff Commission was to consist of nine persons from civil life, to be appointed by the President, with the advice and consent of the Senate. On the 7th of June the President sent to the Senate for approval and confirmation the names of

William A. Wheeler, of New York; John L. Hayes, of Massachusetts; Henry W. Oliver, Jr., of Pennsylvania; Austin M. Garland, of Illinois; Jacob Ambler, of Ohio; John S. Phelps, of Missouri; Robert P. Porter, of the District of Columbia; John W. H. Underwood, of Georgia; and Duncan F. Kenner, of Louisiana. Mr. Wheeler declined the appointment, and several gentlemen to whom it was offered, including Mr. A. A. Low, of New York, the Hon. Hugh McCulloch, and the Hon. Erastus Corning, refused to accept it. Mr. Phelps, of Missouri, also declined, and the two vacant places were filled on the 16th of June, by the appointment of Alexander R. Boteler, of West Virginia, and William H. McMahon, of New York. The action of Congress in providing for the commission was generally regarded as in the interest of conservative changes in the tariff, and the maintenance of its protective features, so far as practicable consistently with the desired decrease of revenue. This impression was confirmed by the character and position of the men appointed as commissioners. Mr. Hayes, who became chairman of the commission, was closely identified with the interests of growers and manufacturers of wool, was secretary of their national organization, and the publisher of a journal in Boston devoted to their affairs, and had long had a local reputation as an able defender of the protective policy. Mr. Oliver was closely connected with the iron interests of Pennsylvania, being largely interested in two extensive establishments at Pittsburg. Mr. Garland was an extensive sheep-raiser, officially connected with the Wool-Growers' Association, and in favor of protecting the raw materials as well as the manufactured products of the country. Mr. Ambler was a man of considerable experience in public life, having seen both legislative and judicial service in his own State, and represented one of its districts in Congress for two terms. He was a decided protectionist, and his appointment was favored by that interest in Ohio. Robert P. Porter, who became the secretary of the commission, was chiefly known as a statistical writer, and one of the leading workers in the United States Census Bureau. Mr. Underwood was a man of long experience in public life in the South, and understood to be favorable to the policy of building up manufacturing interests in that section with the aid of protection. Mr. Boteler was connected with the Whig party before the civil war, and was regarded as conservative in his views on the tariff. Mr. Kenner was extensively engaged in sugar-planting in Louisiana, and represented the claims of that interest. Mr. McMahon held a prominent position in the New York Custom-House, and was selected on account of his familiarity with the details of the collection of duties, the difficulty in administering the laws, and the general requirements of the customs service. He died before the report of the commission was made, but



not before its work was substantially completed.

The Tariff Commission first came together at the summons of the Secretary of the Treasury, and held a meeting at the Ebbitt House, in Washington, on the 6th of July. It merely organized and considered plans. An address was made to the members by the president, Mr. John L. Hayes, of Massachusetts, in which he said:

You will doubtless agree with me that this commission has no other functions than those provided by laws, and that its essential duties are defined by the third section of the act constituting the commission, which is as follows: "It shall be the duty of the commission to take into consideration all the various questions relating to the agricultural, commercial, mercantile, manufacturing, mining, and industrial interests of the United States, as far as the same may be necessary for the establishment of a judicious tariff, or the revision of the existing tariff laws upon a scale of justice to all interests." It would be improper for me to anticipate the conclusions which should be made by your collective wisdom by any interpretation of my own of the law defining your functions; but I may, perhaps, be allowed to refer to one phrase in the law constituting the commission, which I think you will agree with me should be the key-note of our deliberations. The law declares that the objective point of our labors is the establishment of a judicious tariff, or a revision of the existing tariff laws upon a scale of justice to all interests.

With this end in view, no special industry can have undue advantage; no private interest can be subserved; no duty promoting one industry, yet oppressing another, can be justified, and the relations of the industries to each other, no less than the special necessities of each, must be considered. Moreover, through the conditions of justice to all interests made imperative by the law, the constitutional or theoretical scruples which might have existed as to the original propriety of the existing national tariff policy must be waived. A radical or subversive change in the present general economical policy of the country is virtually interdicted, and a judicious, not a revolutionary tariff—a revision, not a destruction, of existing tariff laws—is declared to be the object to which our labors shall conduce.

I have said that this commission has no other functions than those expressed in the law. But there is a paramount and implied condition in all service to the state, namely, the obligation to regard the interests of the nation, or those all-embracing benefits summed up in the words national prosperity. If, in the definition of the subjects which should receive the consideration of the commission, some are omitted which we can scarcely doubt were intended to be kept in view; if questions of revenue, if the interests of consumers, of science, of literature, and of art, are not specially referred to, they may be all included under the implied obligation resting upon us to consider the interests of the nation as a whole. . . . By making the national interests paramount to those of section, class, or industry, we may also find a solution of many questions of opposite individual or sectional interests, and may avoid many difficulties by remembering, while not unmindful of justice to existing interests, that protective duties should be imposed or withheld, not for the benefit of individuals or special industries, but for the good of the nation. If, through the spirit and methods of our labors, we should be so fortunate as to conduce to the result that sectionalism and partisanship shall sink in the aim for the general good, and the policies and names of protection, free trade, and revenue reform, shall be merged in the broader system and phrase—a national policy—the moral will equal the material benefits of the new economical departure.

Sessions were continued in Washington for several days for the completion of preliminary work, and the hearing of testimony was begun at Long Branch, N. J., on the 19th of July. The commission held its sittings at that place until the 22d of August, twenty-nine days being occupied with its investigations there. The witnesses who appeared before it were for the most part representatives of protected interests, who were anxious for the retention of high duties. The first witness was a chemical manufacturer from Philadelphia, who said that there were 1,549 chemical establishments in the country, with an aggregate capital of \$85,000,000, and annual sales amounting to \$118,000,000, and employing 30,000 people. He was not in favor of reducing duties on manufactured chemicals, but made a suggestion that there should be no tax on raw materials not produced in the country, but should be one on such as are produced in the country, varying in amount according to the importance of the material. Chemical manufacturers, he said, were now independent of Great Britain and the rest of the world, and wished to remain so. His testimony was followed by that of a representative of the Manufacturing Chemists' Association of the United States, who said that they did not object to a revision of the tariff or to reduction of some of the duties. This statement was followed by an argument in favor of restoring a 20 per cent duty on quinine. On the 25th of July the commission adopted the following rules regarding the admission of testimony:

1. Oral testimony shall be confined to statement of facts relating to or affecting some one or more of the subjects which, under the law, are proper to be considered by the commission, except that when the witness is shown to be an expert upon any such subject he may give his opinions as such expert in relation thereto.
2. The witness may, in the first instance, make his statement without inquiry, or in answer to inquiries, as the commission may from time to time direct, and each witness who testifies shall be subject to examination and cross-examination by any member of the commission.
3. The commission will also receive written statements, communications, or arguments upon any subject proper for its consideration; but such statements, communications, or arguments will not be published, except by the direction of the commission.
4. Persons desiring to be heard in oral argument upon any subject will make application to the commission in writing, specifying the subject on which they desire to be heard and the time desired. The commission reserves the right, in each instance, to determine whether it will hear such proposed argument, and, if it does, what time shall be allowed, and to fix the time and place for the argument. And such arguments will not be published except by special order of the commission.
5. Persons who are assigned a hearing on argument are requested to furnish to the commission a statement in writing of the points they propose to make, and to be careful in quoting authorities to furnish a list of those cited.

On the 26th, the Assistant-Secretary of the Treasury, H. F. French, submitted an argument in favor of simplicity in classifications



and tables, and the avoidance of ambiguity and complexity in the provisions of the law. He was followed by a representative of the Maltsters' Association, who desired more effective protection against Canadian competition. Then a representative of salt-manufacturers declared that they could not endure any reduction of the duties on salt. An importer and manufacturer of aniline colors and dye-stuffs favored reduction of duties, saying that 1,200,000 pounds of imported dyes in 1881 paid \$1,500,000 in duties, and that those which cost \$1 a pound in England were sold for \$4 in the United States. He was followed by a representative of the New York Free-Trade Club, in favor of a thorough and radical revision of the tariff. On the 27th there were more arguments in favor of a duty on quinine, in the course of which it was stated that the total consumption was 4,000,000 ounces, of which 1,600,000 are consumed in the United States. There were five factories in this country and thirteen in Europe, and the price, which was \$4 an ounce when the duty was abolished, had declined to \$2. A concern, with an investment of \$150,000, produced 200,000 ounces a year. A New York importing house presented a schedule of modified duties for carpetings, silks, woolen fabrics, dress-goods, linens, and cottons. On the following day the linen, hemp, and jute interests put in an appearance, and asked for more protection. There was also a manufacturer of carriages who asked for higher duties. Assistant-Secretary French, on the 31st of July, continued his explanation of the complications and difficulties of the existing tariff system, and advocated the establishment of a customs court. The same day a representative of the drug interest argued for a revision and simplification of duties, and favored in general the putting of raw materials on the free list. A representative of the New Orleans Cotton Exchange demanded that jute-butts, iron cotton-ties, and Manila and Sisal hemp be put on the free list. On the 1st of August the question of sugar duties was brought up, and on this and other occasions it was shown that the Louisiana planters demanded the maintenance of high rates on raw sugars, the refiners favored a reduction on raw but not on refined sugars, and the importers favored a reduction all around. On August 3d an importer and dealer in antiquities desired to have them put on the free list; and a manufacturer of fertilizers asked that sulphur-ore be admitted free. On the 4th there was a statement regarding the cultivation of jute in this country, which favored the retention of the existing duty. The Gold-Beaters' Union demanded an increase of duty on gold-leaf; an importer of paint materials favored a reduction of duties; and an importer of linens took the same ground. This was the general position of importers, while that of manufacturers was for the maintenance or increase of rates. In the early part of August the commission spent two days in

New York, examining the methods of the custom-house and appraiser's office. On the 10th, at Long Branch, a hearing was given to manufacturers of saddlery, hardware, and morocco-leather, the former in opposition to a reduction of duties, and the latter against discrimination between tanned and finished morocco. There was also an argument from a dry-goods importer in favor of free raw materials and lower rates for manufactured goods. The same day there were statements in favor of continued protection of sugar-planters and silk-raisers, from persons connected with those interests.

These statements show the general character and drift of the testimony as it continued at Long Branch. A maker of cutlery demanded protection for pocket-knives; a representative of tobacco-growers wanted a duty on Sumatra tobacco-leaf which should prevent its use for cigar-wrappers here, for which it was especially adapted; silk-growers wanted high duties on raw silk; and so on. One special interest after another appeared and argued for a tinkering of the tariff which should add to their profits. Growers of raw materials wanted protection; manufacturers favored free materials, but protective duties on manufactured products; importers and dealers in foreign goods asked for a reduction of duties, but only an occasional voice was raised in behalf of consumers, and little was heard regarding the wider interests of the nation as a whole. On the 23d of August the commission went to Boston, and spent the three following days in taking testimony there. A variety of manufacturing interests was represented before the commission, prominent among which was that of sugar-refining, which protested against high duties on the low grades of foreign sugar. From Boston the commission went to Rochester, N. Y., where there was one session, on the 29th of August. Communications were received there in favor of admitting living trees, flower-seeds, and iron-ores free of duty. Numerous other communications were read at this session, but they had been previously received, and were from various parts of the country. On the 30th there was a session at Buffalo, at which a reduction of the duties on aniline dyes was opposed, and a reduction of those on pottery was favored, by certain Philadelphia and Boston importers. The only local interest of importance that put in an appearance was that of the maltsters, who desired protection against Canadian malt, but asked for the free admission of barley. August 31st was spent at Cleveland, Ohio, where the principal demand was for an increase of duties on hoop-iron. There was also an argument in favor of protecting the Lake Superior iron-ore interest. At Detroit, Mich., on the following day, a charcoal pig-iron manufacturer argued in favor of retaining the duties on that article, and sundry other interests put in their claims for protection. One day was spent at Indianapolis and two at Cincinnati, where the iron interests were largely represented, and generally

urged the maintenance of high protective duties. The potteries and glass-works put in similar claims. At Louisville, Ky., on the 6th of September, the tobacco interest came to the front to urge the abolition of internal revenue taxes; and communications were received in favor of retaining the duties on sugar, molasses, and rice. The three days following this date were spent at Chicago. The time was largely taken up with the reading of communications received from different parts of the country, though the representatives of some local interests claiming protection appeared. The commission was at Milwaukee September 11th, at St. Paul September 12th and 13th, and at Minneapolis September 14th. At the latter place complaint was made of the duty on Canadian wheat, and the retaliatory Canadian duty on flour. Two days were spent at Des Moines, Ia., and two at St. Louis, September 18th and 19th. At the latter place the lead and zinc interests claimed protection against foreign competition, and arguments were made in favor of maintaining the duties on sugar, molasses, and rice. Here an advocate of free trade appeared in behalf of the farmers and great producing classes of the West, claiming that the burden of protecting special interests fell upon them. From St. Louis the commission went through the South, spending one day at Nashville, one at Chattanooga, two at Atlanta, Ga., one at Savannah, one at Charleston, S. C., one at Wilmington, N. C., and one at Richmond, Va. They heard arguments in favor of protecting sugar, rice, and peanuts, reducing duties on cotton-ties, abolishing internal revenue taxes on tobacco, etc. Everywhere the communications and statements came chiefly from representatives of special industries or from organizations concerned with local interests. The commission reached Baltimore September 29th, and spent two days there, hearing statements regarding chemicals, fertilizers, etc. Six days, beginning with October 2d, were spent in the city of New York. There the commercial and importing interests were found to be in favor of a general reduction of duties, but claims were conflicting according to the special benefits sought from tariff legislation. Manufacturers spoke generally for the abolition of duties on raw materials, and their maintenance on the finished product. After leaving New York the commission spent three days at Pittsburgh, Pa., one at Wheeling, W. Va., and three at Philadelphia, where it closed its public hearings on the 16th of October. An intention to visit the Gulf States and the Pacific coast was abandoned for lack of time. Twenty-nine places were visited in all, seventy-eight days were occupied in taking testimony, and the number of statements received, oral or written, was 604. The testimony occupied 2,625 printed pages.

After the investigations of the commission were completed, some time was spent in preparing the report, which was submitted to Con-

gress on the first day of the session, December 4th. The commission disavowed any purpose of attempting to construct a new system, or apply different principles from those on which the existing tariff was based. They said in their report:

The practical question presented to the commission is that of reconciling the interests of revenue, including the considerations of its sufficient maintenance or possible reduction, with justice to the interests of the nation involved in the preservation of its industries and the security of its labor. The legislation to be recommended is for the present, and not for posterity, which must meet its own emergencies, and the determination of this question involves considerations of expediency, not the least of which is that the measures recommended be such as shall be acceptable to the country and its representatives in Congress. It must accept the facts that discrimination in the imposition of import duties, a discrimination for the most part positive and avowed, and always, at least, with an incidental reference to the defense of the national industries, has been the policy of the country for generations; that in consequence of this policy thousands of millions of dollars have been invested in special pursuits; that the whole business of the country has been adjusted to the conditions of things growing out of this policy, and is inseparably identified with it; and that a subversive or radical change in the present economic system would throw labor out of employment, ruinously depreciate values, and create a general industrial and commercial disaster. With these views, with the unmistakable evidences of public opinion against radical changes, with the whole current of the testimony before the commission in recognition of the necessity of preserving the general structure of our tariff system, with the clear sanction of the law creating this body, and its injunction to render justice to all interests, the commission has deemed it proper to limit its work to a revision, although a substantial revision, of the existing tariff.

The general purpose was to conform to the existing discriminations, and preserve the designations and phraseology of the law while making such changes in rates as were deemed expedient. "Early in its deliberations," says the report, "the commission became convinced that a substantial reduction of tariff duties is demanded, not by a mere indiscriminate popular clamor, but by the best conservative opinion of the country, including that which has in former times been most strenuous for the preservation of our national industrial defenses. Such a reduction of the existing tariff the commission regards not only as a due recognition of public sentiment and a measure of justice to consumers, but one conducive to the general industrial prosperity, and which, though it may be temporarily inconvenient, will be ultimately beneficial to the special interests affected by such reduction."

Entertaining these views, it says, further on:

The commission has sought to present a scheme of tariff duties in which substantial reduction should be the distinguishing feature. The average reduction in rates, including that from the enlargement of the free list and the abolition of the duties on charges and commissions, at which the commission has aimed, is not less on the average than 20 per cent, and it is the opinion of the commission that the reduction will reach 25 per cent. The reduction, slight in some cases, in others not attempted, is in many cases from 40 to 50 per cent. The actual amount of the total re-



duction can not be stated with precision, partly from want of time to make the calculations required for such details in the brief period intervening between the final determination in particular cases and the preparation of this report; and there is no exact standard by which to estimate the amount of reduction in revenue, on account of the varying character, amount, and prices of commodities in the importations of different years. If the reduction reaches the amount at which the commission has aimed, and if there is any truth in the allegation of the opponents of the present economic system, that a duty on articles such as are produced in this country, whether in manufactures or agriculture, enhances the price to the consumer, not only of what is imported, but of the whole domestic production, to an amount of which the duty is a measure, the reduction proposed by the commission would benefit consumers to the extent of hundreds of millions of dollars.

As to the principle generally followed in making reductions, it is said that the effort was "to make the reduction apply to commodities of necessary general consumption, and to di-

minish or withhold the reduction upon commodities of high cost, requiring more labor, and which being consumed principally by the more wealthy classes could bear higher duties, at the same time supplying revenue and encouraging the higher arts without being oppressive in their operation." It is further stated that the purpose was "to make a discrimination in the rate of the duties imposed upon a manufactured product and the raw material or partially manufactured product of which it is made, the object being to impose a higher duty upon the latter." By way of showing how momentous were the interests to be affected by tariff legislation, the commission presented the following table, and the subjoined explanatory remarks, showing the progress of the United States in manufacturing industry during the period of the last thirty years:

CENSUS YEAR.	Number of establishments.	Capital.	Average number of hands employed.	Total amount wages paid during year.	Value of materials.	Value of products.
1850.....	123,025	\$588,245,851	957,059	\$286,755,464	\$555,123,822	\$1,019,106,616
1860.....	140,433	1,009,855,715	1,311,246	878,878,966	1,081,605,092	1,855,861,670
1870.....	252,148	2,118,208,769	2,053,996	775,584,315	2,488,427,242	4,232,825,442
1880.....	253,840	2,790,223,506	2,738,950	947,919,674	3,394,840,026	5,369,667,706

It is to be noted that the figures given for 1870 are upon the basis of the then depreciated currency, while the figures for 1880 are upon a gold basis.

The above table shows that capital increased in the decade ending in 1860 about 90 per cent; during the period between 1860 and 1870, about 110 per cent; and for the last decade only about 32 per cent, to which should be added the difference in the standard of values. That at the close of the first decade referred to, the number of hands employed increased 37 per cent; between 1860 and 1870, 75 per cent; and between 1870 and 1880, about 33 per cent.

From 1850 to 1860 the wages paid increased 60 per cent; from 1860 to 1870, 105 per cent; and from 1870 to 1880, as we come down again to a gold basis, 22 per cent.

The materials used from 1850 to 1860 increased 86 per cent; from 1860 to 1870, 141 per cent; and from 1870 to 1880, 36 per cent.

The value of the products of these manufactures increased from 1850 to 1860, 85 per cent; from 1860 to 1870, 124 per cent; from 1870 to 1880, 27 per cent.

The progress of the nation in manufactures during the last forty years has been, for capital invested, 423 per cent; for hands employed, 180 per cent; for wages paid, 300 per cent; for materials used, 511 per cent; and for value of products, 427 per cent.

The growth of industries during the last decade, upon the whole, has been a healthy and prosperous one, and yet it has not more than kept up with the growth of population. The increase in population during the last ten years has been about 80 per cent, whereas it has been shown that the increase of capital invested in manufactures has been 32 per cent; in the number of hands employed, 35 per cent; in the amount of wages paid, 22 per cent; in the value of materials consumed, 36 per cent; and in the value of the products, 27 per cent.

According to Mr. Mulhall, an English statistician of recognized authority, the total value of the products of English manufactures for 1880 was about \$4,000,000,000. The table above given shows the value of the products of our own manufactures to be, in round numbers, \$5,370,000,000, giving the United States the eminence of being the greatest manufacturing country in the world.

The commission presented a series of schedules of duties to be imposed under its proposed revisions of the law, and also various changes in the administrative methods of the revenue system. Among the latter were the substitution of a single entry-fee at the custom-house, for numerous and annoying small fees; giving authority for certain procedures already in use without the sanction of law; giving facilities for the importation of the personal effects of immigrants; providing that the weights and measures employed in invoices may be those in general use in the country of exportation; requiring invoices of merchandise subject to *ad valorem* duties to be made out in the currency actually paid therefor, as well as that of the country from which importation is made; limiting the requirements of triplicate invoices to articles subject to *ad valorem* duties only; making it imperative that, before certifying to an invoice, the consular officer shall require an oath, affirmation, or declaration that the invoices are correct; providing more equitable, rigid, and efficient penalties for under-valuations; providing for an appraisement, separate and distinct in all cases; permitting the examination of bulky goods for appraisement at other places than the public stores. Provision was also made for the repeal of the requirement of the existing law that land transportation costs and charges should be added to the basis of computation for *ad valorem* duties, and a bill was submitted for establishing a customs court for the determination of disputed questions arising under the tariff laws as to the classification of duty on imported merchandise, etc.

The schedules of duties were fourteen in

number, lettered from "A" to "N." Schedule "A" comprised chemical products which were before included in "sundries." The capital invested in the interest was said to have increased nearly 200 per cent in ten years, while the amount paid in wages had more than doubled, and the value of the product had increased from \$47,397,388 to \$117,407,054. Many articles, mostly raw materials of manufacture, previously subject to duty, were placed on the free list; and most of the changes in rates were in the direction of reduction. Counting additions to the free list, the general reduction of duties on chemical products was 25 to 30 per cent of the old rates. Schedule "B" comprised earthenware and glass-ware. No change was recommended in the duty on brown earthenware and common stone-ware, and that on white and printed earthenware, white and decorated china, porcelain, and parian ware was increased 15 per cent. It was claimed that this increase was largely offset by the abolition of duties on packages, inland freights, and charges and commissions. The old rates on window and plate glass were retained, and those on cut, engraved, printed, colored, and other fancy glass-ware were raised from 40 to 50 per cent *ad valorem*. Schedule "C" covered metals. Increase of production in the principal industries affected by this class of duties is shown in the census statistics to be from 1,434 establishments in 1850 to 3,532 in 1880, from 22,370 to 298,862 hands employed, from \$16,370,760 to \$416,041,648 of invested capital, from \$7,165,248 to \$122,648,191 paid in wages, from \$43,797,854 to \$380,304,950 value of materials used, and from \$83,954,529 to \$604,553,460 value of products. In the commission's revision of the schedule of duties specific rates were substituted for *ad valorem*, and the changes were in the direction of reduction throughout the list. No material change was made in the duty on iron-ore, but fifty cents a ton instead of 20 per cent *ad valorem* was recommended. The rate for pig and scrap iron was three tenths of one cent per pound, a slight increase for cast scrap-iron, and a reduction for pig-iron. The rate on steel rails was reduced from \$28 per ton of 2,240 pounds to eight tenths of a cent per pound. Duties on the different kinds of bar-iron were reduced from 10 to 20 per cent on the old rates; those on sheet-iron were not materially changed; varying reductions to a moderate extent were made on hoop, band, and scroll iron. Reductions on hardware, tools, etc., varied from 20 to 50 per cent. The duty on tin plates was considerably increased. The reductions recommended on steel ranged from one fourth of one cent per pound on the lower class to about 30 per cent on the higher grades of crucible steel. On iron and steel wire the reductions ranged from 20 to 30 per cent; on manufactures of copper, lead, and zinc, from 15 to 25 per cent. All compound duties were discarded. The high duty on copper-ore was retained.

The duties on woods comprised in schedule "D" were not changed. Schedule "E" contained the duties on sugar, which were simplified and reduced. The polariscope test of saccharine strength was adopted, and the reductions were equivalent to 21.70 per cent on sugars below No. 13 Dutch standard, and 10 per cent on those above that grade. No changes were made in the duties on tobacco included in schedule F, except to abolish the compound duty on cigars, making the rate \$3 per pound. Schedule G included provisions. In this there were few changes, and those in the direction of reduction, but specific duties were substituted for *ad valorem*. Schedule H embraced liquors, and no material change was made, except to abolish allowances for breakages. Schedule I included all cotton goods. Compound duties were abolished, specific rates generally adopted, and the classifications were simplified. Some reduction was effected in the duties, though they remained at rates equivalent to from 30 to 60 per cent of the cost of the goods. Schedule "J" (flax, hemp, etc.) was simplified, but no material change was made in the rates of duties. Next to the metals schedule that of wool and woollens, designated as "K," was regarded as the most important. Here alone compound duties were retained. It was claimed that reductions were effected amounting to from 18 to 40 per cent, being greatest on the cheaper goods, but duties were retained on raw material as well as manufactured products. In the silk schedule ("L") specific were substituted for *ad valorem* duties, and a reduction effected said to be equivalent to about 23 per cent. The product of manufactured silks had increased from \$12,739,362 to \$41,033,045 in the single decade from 1870 to 1880. Books and papers were taken from "sundries" and classified in a separate schedule designated "M," but no material change was made in the duties. Schedule "N" included sundries. The free list was somewhat enlarged.

The total value of merchandise imported into the United States in 1881 was \$650,618,999.63, of which \$202,557,411.68 came in free of duty, and \$448,061,587.95 were dutiable. The amount of duties collected was \$193,800,879.67. The total amount of the manufactured products of the country in 1880 is put at \$5,369,667,706, and classified as follows under the tariff schedules in the report of the commission:

SCHEDULE.	Products in 1880.
A. Chemicals . . . . .	\$117,407,054
B. Earthen and glass ware . . . . .	28,956,693
C. Metals . . . . .	604,553,460
D. Woods . . . . .	509,485,611
E. Sugars . . . . .	181,404,520
F. Tobacco . . . . .	118,665,366
G. Provisions . . . . .	1,036,572,580
H. Liquors . . . . .	142,122,043
I. Cotton . . . . .	210,950,383
J. Flax . . . . .	5,518,866
K. Woollens . . . . .	267,182,914
L. Silk . . . . .	41,033,045
M and N. Sundries, books, etc. . . . .	1,159,989,616
Remainder . . . . .	945,825,550
Total . . . . .	\$5,369,667,706



While the classifications and rates of duty fixed in the schedules were not satisfactory to all the members of the commission, they received their final assent. Commissioner Underwood, however, did not concur in the recommendation for the establishment of a customs court. Commissioners Ambler, Porter, and Underwood withheld their approval from the retention of compound duties in any case. Commissioner Ambler did not concur in recommending the abolition of duties on what are known as "dutiable costs and charges," considering those to be a legitimate part of the cost of the goods. Commissioners Garland and Ambler recommended the adoption of a system of valuation for goods, subject to *ad valorem* duties, based on the value of the goods in the markets of the United States at the time of their importation. With these qualifications, the report was signed by all the members of the commission, except Mr. McMahon, who died before it was finished.

The report was referred, on the first day of the session of Congress, to the Ways and Means Committee of the House of Representatives, which proceeded to construct a bill of its own, based on the suggestions of the commission. The Finance Committee of the Senate also set about framing a measure which was attached as an amendment to the House bill for reducing internal revenue taxes which had passed the lower branch at the preceding session. The Senate bill was the first to be reported, and was called up for consideration on the 10th of January. The House bill was reported by the Ways and Means Committee on the 16th. A caucus of the Republican members of the House, held on the 19th, decided that it should be brought up for consideration on the 21st, and have preference over all other legislation, except appropriation bills, until disposed of. It was not, however, brought up until the 25th. Both the House and Senate bills contained many variations from the rates proposed by the commission, and some changes in classification were made. The Ways and Means Committee of the House had taken a number of articles, including quinine, from the free list and subjected them to duties, and had raised the rates in many cases, especially in the metals and wool and woolen schedules. In the Senate bill there were fewer instances of increase, while some reductions were made from the rates proposed by the commission. The two bills were under discussion, and subject to amendment, for several weeks. Many changes were made in the Senate bill, the general disposition appearing to be in favor of reduction, while there was a strong pressure of special interests to maintain or advance rates. The schedules which excited most debate were those including lumber, iron and steel, sugar, and woolen manufactures. By the 20th of February the House had practically abandoned all effort to dispose of its own measure, and had failed in an effort

to pass a bill for the reduction of internal revenue taxes by a two-thirds vote under a suspension of the rules. On the date mentioned the Senate passed its bill, by a vote of 42 to 19. Nine Democratic Senators voted for the bill, and 18 against it—Mitchell, of Pennsylvania, being the only Republican recorded in the negative.

The bill as passed by the Senate was satisfactory neither to the revenue reformers nor to the high protectionists. The latter class had the predominating influence, and were determined to secure further modifications by forcing the matter into the hands of a committee of conference, without permitting a direct vote on the question of concurrence in what was nominally an amendment of the House revenue bill, or on the question of passing the bill. The measure might be passed under a suspension of the rule by a two-thirds vote, or it might come up for concurrence or non-concurrence in the Senate amendment, when the question could be settled by a majority vote. The chance of its being reached under the rules for the latter action was slender, and a rule was proposed by Mr. Kasson, of Iowa, permitting the House to take up the bill for concurrence or non-concurrence at any time by a majority vote. Those who desired to make further changes in the rates, were not willing to risk the chance that the bill might pass by a two-thirds vote under a suspension of the rules, if a motion to that effect were made, and were afraid that the Senate amendment would be concurred in, should a vote on that question be taken under the proposed new rule. Their desire was to shut off every alternative but a reference to a committee of conference. A caucus of Republican members of the House was held on the 22d of February, and, after considerable discussion, the following resolution was adopted:

*Resolved*, That in the opinion of this caucus the House should vote to non-concur in the Senate amendment to the House revenue bill, and should refer the same to a committee of conference of five members from each House.

Although there were 118 members present at the caucus, only 85 votes were cast for the resolution. Mr. Kasson tried to get a declaration in favor of so amending the rules as to "enable the majority of the House to reach and finally act at this session upon the revenue and appropriation bills," but did not succeed. On the 24th the House Committee on Rules reported the following:

That during the remainder of this session it shall be in order at any time to move to suspend the rules, which motion shall be decided by a majority vote, to take from the Speaker's table House bill No. 5,533, with Senate amendments thereto, entitled "A bill to reduce internal revenue taxation," and to declare a disagreement with the Senate amendments to the same, and to ask for a committee of conference thereon, to be composed of five members on the part of the House. If such motion shall fail, the bill shall remain on the Speaker's table unaffected by the decision of the House on said motion.

As the united opposition of the Democrats was anticipated to this so-called amendment to the rules, it was necessary to secure a Republican quorum to adopt it. An effort was made on the 26th, but without success. Promptly on the following morning, however, the rule was adopted by a vote of 129 to 22, most of the Democrats refraining from voting. The question of the constitutional right of the Senate to originate revenue measures was then raised. Mr. Hammond, of Georgia, offered a resolution declaring that the action of the Senate, in substituting for the House bill to reduce internal revenue taxation, a proposition imposing both import duties and internal taxation, was in conflict with the true intent and purpose of the clause of the Constitution which requires that all bills for raising revenue shall originate in the House of Representatives, and declaring further that the bill with Senate amendments shall lie upon the table. A substitute was offered by Mr. Haskell, of Kansas, as follows:

*Whereas*, House bill No. 5,538, entitled "An act to reduce internal revenue taxation, and for other purposes," under the form of an amendment in the Senate to title 33 of the Revised Statutes, which provides for duties on imports, has been so modified and changed by the introduction of new provisions, containing among other things a general revision of the statutes referred to, as both to increase and reduce duties on imports, and in many instances to repeal and in others to amend the laws imposing import duties; and

*Whereas*, In the opinion of the House, it is believed that such changes and alterations are in conflict with the true intent and purpose of the Constitution, which requires that all bills for raising revenue shall originate in the House of Representatives: therefore—

*Resolved*, That if this bill shall be referred to a committee of conference it shall be the duty of the conferees on the part of the House on said committee to consider fully the constitutional objections to said bill as amended by the Senate and herein referred to, and to bring the same, together with the opinion of the House in regard hereto, before said conference, and if necessary, in their opinion, after having conferred with the Senate conferees, said conferees on said committee may make report to the House in regard to the objections to said bill herein referred to.

This was adopted by a vote of 139 to 122. Mr. Kelley, of Pennsylvania, then moved to suspend the rules, take from the Speaker's table the internal revenue bill, with Senate amendments, non-concur in those amendments, and appoint a conference committee, to consist of five members on the part of the House. Agreed to—yeas 148, nays 110. This was a party vote, except that Messrs. Converse, Curtin, Ermentrout, Hardenbergh, Klotz, Ladd, Morse, Mutchler, Phelps, Wilson, and Wise, of Pennsylvania, voted with the Republicans in the affirmative, and Messrs. Brumm, Burrows, of Missouri, Campbell, and Updegraff, with the Democrats in the negative. The conferees first appointed on the part of the Senate were, Senators Morrill, Sherman, Aldrich, Bayard, and Beck. Those on the part of the House were, Kelley, McKinley, Haskell, Randall, and Carlisle. The first three in each case were Republicans, and known high-tariff men. The others were Democrats,

and, with the exception of Randall, revenue reformers. On the next morning, February 28th, Mr. Randall asked to be relieved from service on the conference committee, and the request was granted. Mr. Morrison, of Illinois, and Mr. Tucker, of Virginia, having successively declined to serve, Mr. Speer, of Georgia, was appointed to the vacant place. In the Senate, on the same day, in view of the constitutional question raised in the House after the conference was asked for, the following resolution was adopted without a division:

*Resolved*, That it is the opinion of the Senate that the conference on the House bill 5,538 (the internal revenue and tariff bill) should be full and free, and that if the Senate conferees become advised that any limitation has been placed by the House upon the action of their conferees the Senate conferees shall retire and report the fact to the Senate for its consideration.

At the first conference, on the evening of February 28th, the House resolution regarding the Senate's right in respect to revenue bills was presented, and Senators Bayard and Beck took the ground that it made it necessary for the Senate conferees under their instructions to report without further conference. Their Republican colleagues did not agree with them, and on the following morning Messrs. Bayard and Beck asked to be relieved from further service on the committee. They were excused, and Senators Voorhees and McPherson were named. Mr. McPherson declined, and Mr. Harris was named. He declined also, and then Mr. Voorhees asked to be excused. Messrs. Morgan and Gorman were next named, and asked to be excused. The same result followed with Messrs. Davis, of West Virginia, and Jones, and with Messrs. Butler and Maxey. It being intimated that no Democrats could be found to serve, Senators Ingalls and Mahone were appointed. The former declined, as did Mr. Miller, of California; and finally Mr. McDill was named, and the committee was once more complete. The committee reached an agreement and made a report to the two Houses on the evening of the 2d of March. In the Senate, after an explanation of the report by Mr. Morrill, and a short debate, in which Mr. Beck opposed the changes that had been made, a vote was reached at 12.30 A. M. of March 3d. It resulted in an acceptance of the report by a vote of 32 to 31. The report was not considered in the House until the regular session of March 3d, when Mr. Kelley made an explanation, and a debate followed, in which Mr. Carlisle was the chief opponent of the committee's work. A vote was taken at 5.30 P. M., and the report was agreed to—152 to 116. Twenty Democrats only voted for the bill, and 16 Republicans voted against it. The day's session continued into the morning of Sunday, March 4th, and before the adjournment the tariff bill was signed by the President.

The effect of the bill is a matter which it is difficult to calculate in advance of any experience of its working, and opinions differ as to



the extent of the reduction in revenue to be effected. Mr. Kelley, in explaining the action of the conference committee in the House, estimated the total reduction at \$65,000,000 to \$70,000,000, of which \$35,000,000 to \$40,000,000 would be taken from the internal revenue. All internal revenue taxes were repealed except those affecting whiskey, beer, tobacco, and bank circulation, and those on tobacco were materially reduced. Those entirely abolished were the taxes on bank capital and checks, and on matches, patent medicines, and perfumery. Those on tobacco were reduced one half, viz., from sixteen to eight cents per pound, a proportionate reduction being made in the case of cigars and cigarettes. Of the final changes in the rates of duty the following may be mentioned as most important: Those on common earthenware increased from 50 to 55 per cent *ad valorem*; but it was claimed that this was offset by excluding packing and transportation charges. Painted and gilded earthenware was transferred to the class of china and porcelain, and made to pay 60 per cent. The rate on iron-ore was increased to 75 cents per ton, the compound duty under the old law amounting to 57 cents, and that recommended by the commission being 50 cents. The old rate on steel rails was \$28 per ton; it was fixed by the conference committee at \$17. There was a moderate reduction on pig and bar iron. In the large and important schedules of cotton and woolen materials and goods there were many changes, but the reduction in rates was comparatively small, and in some cases they were increased. Mr. Kelley, in his explanation, stated that cotton goods, which previously paid 35 per cent *ad valorem* (such as stockings, hose, shirts, and drawers), would have to pay 40 per cent; and while there was a reduction of about 18 per cent on wool (the raw material), the duties on "all-wool" fabrics was increased from 6 and 8 cents a yard and 35 and 40 per cent *ad valorem*, to 9 cents a yard and 40 per cent *ad valorem*. Jute-butts were taken from the free list and subjected to a duty of \$5 a ton. The duty of 25 per cent on printed books was retained. In the sugar schedule there was reduction in the grades below number 13, Dutch standard, to 2½ cents a pound, amounting to about 15 per cent of the old rates. On the higher grades the reduction was about 28 per cent.

There was ample evidence that the result was satisfactory to no considerable class of citizens, and that the work of revising the tariff was not regarded as by any means complete. The reduction in revenue was very moderate, that in the burden of taxation still less, while the complications and uncertainties of the tariff were hardly diminished. The new law was to take effect July 1, 1883.

**TELEGRAPHS AND TELEPHONES.** Statistics of the telegraph and telephone companies of the United States were collected by the national Government for the first time in 1880, and are given in the reports of the tenth cen-

sus. The following are the statistics of the telegraph companies:

RECEIPTS.	
From messages.....	\$13,512,116
From other sources.....	3,184,507
Total.....	16,696,623
Net.....	6,573,848
EXPENSES.	
Salaries.....	\$4,896,123
General expenses.....	2,804,158
Repairs.....	1,045,880
All other expenses.....	1,486,114
Total.....	10,218,284
CHARGES AND OTHER ITEMS.	
Interest paid on debt.....	\$564,341
Sinking-fund appropriation.....	40,000
Total.....	604,341
Net income.....	5,969,501
Dividends declared.....	4,186,749
BALANCE FOR THE YEAR.	
Surplus.....	\$1,882,971
Deficit.....	95,720
ASSETS.*	
Franchise.....	\$93,062,921
Cash.....	1,087,735
Bills receivable.....	179,269
Accounts receivable.....	2,992,652
Total assets.....	97,232,639
LIABILITIES.*	
Capital stock.....	\$67,901,235
Funded debt.....	8,167,492
Other debt.....	1,201,071
Profit and loss.....	19,962,220
Total liabilities.....	97,232,639
CAPITAL STOCK.	
Authorized by law or charter:	
Number of shares.....	968,021
Amount.....	\$75,907,250
Issued for cash:	
Number of shares.....	889,148
Amount.....	\$66,529,200
MESSAGES TRANSMITTED.†	
Number for the press.....	3,154,998
Number for other persons.....	28,548,788
Total.....	31,703,181
DESCRIPTION OF LINES.	
Total length of lines—miles.....	110,726
Total miles of wire.....	291,212
Number of stations or offices.....	12,510
Principal terminus stations.....	205
Number of poles set during the year.....	243,848
AVERAGE NUMBER OF PERSONS EMPLOYED.	
General officers.....	173
General office-clerks.....	165
Operators.....	9,661
Messengers.....	2,469
Line-repairers and other employes.....	2,461
Total.....	14,928

The census report on the telephone system of the United States gives returns of 148 companies and private concerns, which had 84,305 miles of wire, 54,319 receiving telephones, and 3,338 employes.

\* The railroad companies owning telegraph lines have reported their receipts, expenses, and general financial statements, but the assets, liabilities, etc., of such companies, being included with their railroad accounts, are not included in the above statistics.

† Twenty-seven of the seventy-seven companies make no report of the number of messages sent. Of these, four are operated by the Western Union Company, two are not in operation, two make no report, the Baltimore and Ohio is operated by the railroad company, and the Gold and Stock does not have a message business. The remaining seventeen companies, reporting an aggregate amount of \$410,737.64 receipts from messages, have kept no record of the number of messages sent. The receipts from these companies are only a little more than 2 per cent of the total receipts from messages sent.

**TENNESSEE. STATE OFFICERS.**—Governor, Alvin Hawkins; Secretary of State, D. A. Nunor; Treasurer, M. T. Polk; Comptroller, James N. Nolan; Superintendent of Public Schools, W. S. Doak (died in July), succeeded by G. S. W. Crawford; Commissioner of Agriculture, Statistics, Mines, and Immigration, A. W. Hawkins; Attorney-General, B. J. Lea; Adjutant-General, Ernest Hawkins. Judges of the Supreme Court: J. W. Deadrick, Chief-Justice; T. J. Freeman, Peter Turney, W. F. Cooper, and W. J. McFarland, Associate Justices. United States Senators, Isham G. Harris and Howell E. Jackson. Members of the Forty-seventh Congress: J. D. C. Atkins, L. C. Houk, J. F. House, Benton McMillan, W. R. Moore, A. H. Pettibone, C. B. Simonton, W. O. Whitthorne, Richard Warner, and George G. Dibrell. Speaker of the State Senate, George H. Morgan; Speaker of the House of Representatives, H. B. Ramsey. Members (elect) of Forty-eighth Congress—First District, A. H. Pettibone, Republican; Second District, L. C. Houk, Republican; Third District, George C. Dibrell, Democrat; Fourth District, Benton McMillan, Democrat; Fifth District, James D. Tillman, Democrat; Sixth District, A. J. Caldwell, Democrat; Seventh District, J. G. Ballentine, Democrat; Eighth District, John M. Taylor, Democrat; Ninth District, Rice A. Pierce, Democrat; Tenth District, Carey Young, Democrat.

**FINANCES.**—The biennial report of the Treasurer, dated December 20, 1882, states as follows:

Balance in Treasury December 20, 1880.....	\$222,424 39
Amount received to December 19, 1881.....	1,057,147 18
Amount received to December 19, 1882.....	783,076 84
Total.....	\$2,062,648 41
Amount paid out on Comptroller's payable warrants from December 20, 1880, to December 20, 1881.....	\$680,281 87
Amount paid out from December 20, 1881, to December 20, 1882.....	904,401 46
Total.....	\$1,584,683 33

leaving a balance on hand December 20, 1882, of \$508,015.08. The State tax levy for 1882 was 20 cents on the \$100, which, on the assessed value of the taxable property in the State, amounting to \$221,929,813, should produce \$443,859.60, of which up to December 20th only \$142,823.72 were collected, leaving unaccounted for or uncollected \$301,035.88. The taxable property of the State for the year is as follows:

Acres of land, 25,199,573, valued at.....	\$146,657,593
Value of town lots.....	48,725,735
Value of other property.....	26,546,245
Total value.....	\$221,929,813

This is a decrease of \$3,360,060 as compared with 1881; but the value of personal property in 1882 shows an increase of \$10,412,907 as compared with that of the previous year.

The State debt, upon which no interest has been paid since July 1875, with the exception of those bonds held by educational and charitable institutions, and by the widow of Presi-

dent James K. Polk, has agitated the State during the entire year. The decision of a majority of the Judges of the Supreme Court of the State, in the case of Henry J. Lynn *et als* vs. M. T. Polk *et als*, delivered in February, declared the act of April, 1881, "to settle and compromise the bonded indebtedness of the State," to be unconstitutional and void. This act was designed to fund the entire debt at 100 cents on the dollar in bonds bearing 3 per cent annual interest, payable in ninety-nine years after date of issue, but redeemable at any time after five years at the pleasure of the State, and the act further provided that the interest coupons of the new bonds be receivable, at and after maturity, for all taxes and debts due to the State, and that the Secretary of State, Comptroller and Treasurer should constitute a "funding board" to carry out the purposes of the act. The court, by three of the judges (Judges Turney, Freeman, and McFarland), against two (Chief-Justice Deadrick and special Judge Ewing), held that the 3 per cent adjustment was legal, but that the part of the act making the coupons receivable for taxes was illegal, because the Legislature has no power to contract away the State revenues for such a time, or to make any contract which a subsequent Legislature can not modify or repeal. Said Judge Turney:

If the proposal to compromise is held good and shall be accepted by the bondholders, it will then be out of the power of any Legislature to at all interfere with the law under any circumstances. The provision that the coupons shall be receivable for taxes and all debts due the State becomes a contract.

The language of the provision gives to the holder the right to employ such means and legal process as will compel compliance, and so far the financial agency will be transferred to the creditors and through them to the courts, taking the management and control of the Treasury out of the hands of the Legislature and placing them beyond the protection of the courts of the State.

The moment the contract is executed it becomes the subject of Federal jurisdiction, and all the State courts are subordinate jurisdictions, and whatever may be the rulings of the State courts, and whenever the suit may be instituted for the enforcement of the contract, the Supreme Court of the United States will have the final and, of course, conclusive jurisdiction. Its decisions will be binding upon the State courts.

This will be a surrender of sovereignty. The State will no longer be its own guardian, with power to make provisions for its support and existence, but will be the ward of the Federal Government for ninety-nine years, its estate to be administered at the beck and nod of the bondholder, a centralization of the worst form.

A further consequence of the act will be a surrender by the State of its inherent as well as constitutional right of determining when and in what court and in what form it may be sued, or of withholding or withdrawing its liability to suit at its pleasure.

It is the right and duty of the State to hold its own purse-strings, to be its own financial agent, to provide for its own necessities, and to maintain its own sovereignty. These rights and duties must be exercised and performed at any cost and under all circumstances.

If the act before us is declared to be constitutional, they are all gone by an absolute transfer to the bondholders to be administered in a foreign court.



Chief-Justice Deadrick, in pronouncing the dissenting opinion, said:

1. I am of opinion that the title of the act, "to compromise and settle the bonded indebtedness of the State of Tennessee," sufficiently expresses the subject thereof; that it contains but one subject, the several sections of the act being pertinent to the object expressed in the title, and therefore it is not void, as being repugnant to section 17 of Article II of the Constitution of Tennessee.

2. I am further of opinion that the courts of the State have no power to review or reverse the legislative action of the General Assembly, except for the reason that such action is violation of the Constitution; and that such action, if within their constitutional power, can not be questioned by the courts of the State upon allegations of fraud and bribery.

3. I am also of opinion that tax-paying citizens may file their bill to protect themselves from the injurious operation of a threatened and impending act which is alleged to be unconstitutional, although such act is about to be performed under the apparent authority of the State. The court may inquire if there exists legal authority for the act; if so, it will not impede or obstruct it. On the other hand, if it appears it is prohibited by the fundamental law, it should restrain it upon the ground that the injurious act about to be done is unauthorized by law.

4. I am, therefore, of the opinion that the constitutionality of the act is fairly presented to this court for its decision and that the question for our deliberation is, Had the Legislature the power to pass it? And in my opinion it had the power—there being no exhibition or restraint in the Constitution to prevent it from doing so.

I, therefore, concur with Judge Ewing in holding that the act is constitutional and valid, and that the Chancellor's decree dismissing the bill should be affirmed.

The General Assembly which passed the 100-3 act, was convened by Governor Hawkins in extraordinary session, for the express purpose of adjusting the debt, and passed an act on May 19, 1882, known as the "60-6 act," authorizing the funding of the debt by issuing new bonds for sixty cents on the dollar, bearing 3 per cent interest for the first two years, 4 per cent for the next two years, 5 per cent for the next two years, and 6 per cent thereafter, and declaring that the funding under this act should cease after January 1, 1883. The necessary steps were taken to execute this law immediately after its passage, but at the close of the year the Comptroller reports that the holders of more than half of the outstanding bonds had declined to avail themselves of its provisions. It is reported that, under this act, only \$13,706,812.77 of the old bonds and accrued interest have been funded, that is, at 40 per cent off, new bonds for \$8,226,540 have been issued, leaving upward of \$14,000,000, bonds and overdue interest, still unfunded. This act was passed in acceptance of the proposition made by Mr. Eugene Kelly, of New York, as the chairman of the bondholders' committee, and as authorized to act in their behalf by a reported majority in numbers and amount of the holders of Tennessee bonds. The failure of all the bondholders to avail themselves of the compromise offered by this act within the specified time, left the question of the debt still as a bone of contention be-

tween those who favored the full payment of the debt, and were opposed to the compromise, and those who advocated the payment of a much smaller proportion of it than the act contemplated, and it consequently became a leading party issue in the canvass preceding the fall elections. The Democrats were divided into two parties, the "State-Credit" and the "Low-Tax" parties, and the Republicans expected, by alliance with the "State-Credit" Democrats, to carry the State, and obtain the power and patronage of the government.

The total bonded debt, as reported by the Comptroller on April 1, 1882, was..... \$20,206,800 00  
The accrued interest amounted to..... 8,183,551 50

Total liability April 1, 1882 ..... \$28,390,351 50

The Republican State Convention met May 3d, at Nashville, and nominated Alvin Hawkins for re-election as Governor.

The Democratic Convention, representing both wings of the party, met on June 20th, and on the fifth ballot nominated General W. B. Bate as the Democratic candidate for Governor. The nomination was afterward made unanimous. The division of opinion on the question of the State debt caused a protracted discussion on the majority and three minority reports of the committee on resolutions and platforms, resulting in the adoption of the majority report, which is as follows:

The Democracy of Tennessee, in State Convention assembled, declare:

1. That the Democrats of Tennessee, with their majority of the popular vote, are the rightful guardians of the honor and good name of the State, and that they willingly accept the duty and responsibility of preserving them from taint or suspicion, and that it is equally their right and duty to settle its indebtedness.

2. That while we accord to all an honest difference of opinion, we regard the enactment of the 60-3-4-5-6 as unwise, because it is, in our opinion, not in accord with the views of the people.

3. That there is a portion of the State debt, such as the bonds issued for the building of our Capitol, for the purchase of the Hermitage, etc., and commonly known as the State debt proper, with accrued interest, the validity of which has never been disputed by any portion of our party, we consider as a valid and sacred obligation of the State, and favor the payment of the same in full, less war interest.

4. That we tender to our creditors a settlement of the remainder of the State debt, by paying one-half the principal and accrued interest by issuing the bonds of the State bearing interest at the rate of 3 per cent per annum for the first ten years, and 4 per cent interest from thence to their maturity.

5. That we are unalterably opposed to every species of monopoly as destructive of liberty and the best interest of the people, and to this end we favor the establishment of a commission, the object of which shall be to regulate the tariffs charged by the railroads of the State so as to put an end to the unjust discrimination by said roads in favor of through as against local freights.

6. That we favor the time-honored doctrine of instruction, and recognize the right of the people at all times and upon all questions to communicate their views to their representatives.

7. That we favor an efficient public-school system, and the liberal education of all the children of the State.

8. We arraign the Republican party for its venality

and corruption in the administration of the State and Federal Government, and for its total disregard of all civil-service reform; and do hereby declare our unqualified opposition to the practice of said party in levying upon the employes of the Government a tax for political purposes.

Upon the adoption of the platform, a protest against it was made by about 150 delegates, among whom was ex-United States Senator Bailey, who afterward left the convention, and organized a conference, with General W. H. Jackson as chairman. Their objection to the platform was that it was "an effort on the part of the debtor factions to harmonize their differences at the expense of the public creditor, and to determine judicially upon that which should alone be adjudicated by a solemn court of justice, or else by voluntary agreement between the debtor and creditor." Having adopted a resolution directing the chairman to appoint an Executive Committee, and instructing that committee to call a convention of "the true Democracy of the State to meet at Nashville, July 11th, and having appointed a committee to prepare and publish an address to the public, stating their reasons for withdrawing from the convention, the conference adjourned. The address set forth in forcible terms the committee's unqualified approval of the "60-3-4-5-6" compromise, and stated that the new terms proposed, "although unjustly discriminating between the creditors," not only does not lessen the sum to be paid by the people, but makes it greater than that to be paid under the settlement made by the Legislature.

The convention of the "State Credit" wing of the Democratic party met on the 11th of July, passed resolutions approving the act of May 20th, opposing repudiation, advocating a liberal system of public schools, favoring the establishment of a railroad commission to regulate freights, etc., so as to prevent unjust discrimination, and arraigning the Republican party for its extravagance, disregard of the organic law, its tendency to centralization, and its protection of monopolies. After the adoption of the platform, Mr. Joseph H. Fussell was nominated as the "State-Credit" candidate for Governor.

The Greenback party also nominated a candidate, John R. Beasley. Their platform opposed the payment of any part of the debt, except a small portion of the "State debt proper," and not even that, unless the people at the ballot-box voted in favor of it. This party held that all the "railroad" bonds were illegally issued.

The canvass was active and heated, resulting in the election of General W. B. Bate, by a majority of 27,454 over Hawkins, 114,127 over Fussell, and 109,211 over Beasley, in a total vote of 224,204. The result of the election is understood to be an expression of the popular will against the "60-3-4-5-6" funding act, and in favor of an adjustment by the next Legisla-

ture on the following terms: 1. The payment of the "State debt proper" in full, less war interest, in bonds, payable in as short a period as possible, and bearing the same interest per annum as the original bonds. 2. All bonds held by educational and charitable institutions, and the 29 6 per cent bonds belonging to Mrs. James K. Polk, to be paid in full. 3. The remainder of the debt to be settled at fifty cents on the dollar, principal and interest (including war interest), in bonds to run for thirty years, with privilege of earlier redemption, and to bear interest at 3 per cent per annum. It is sought to excuse this repudiation of the "60-6" act, under which nearly half of the debt has been funded, on the ground that its passage was open to suspicion of corruption, that the people not only did not sanction it, but positively instructed many of their representatives who voted for it to vote against it, and that the terms which are now contemplated and approved by the people are the best they can afford to offer. The following is said to be a correct statement of the bonds originally issued, and constituting the "State debt proper."

500 bonds issued to Union Bank of Tennessee..	\$500,000 00
2,500 bonds issued to Bank of Tennessee.....	2,500,000 00
1,166 bonds issued to build the Capitol of Tennessee.....	866,000 00
48 bonds issued to purchase the Hermitage.....	48,000 00
1,258 bonds issued for stock in turnpikes.....	1,262,356 66
449 bonds issued for stock in Hiwassee Railroad Company.....	449,000 00
202 bonds issued for stock in East Tennessee and Georgia Railroad Company.....	202,000 00
200 bonds issued for stock in La Grange and Memphis Railroad.....	217,250 00

Total, 6,323 bonds, amounting to.....\$6,044,606 66

A bill was passed by the Legislature at its second extra session to redirect the State according to the congressional apportionment, although the number of representatives—ten—is not increased. After the bill was enrolled, signed by the Speakers of both Houses of the General Assembly, and approved by the Governor, it was discovered that three counties—Rhea, Meigs, and Cumberland—were not named in the bill. The defect was not detected until after the Legislature had adjourned. The Attorney-General and other prominent lawyers advised the Governor that the bill was void, on the ground that, if the Legislature, in dividing the State into congressional districts, could leave out three counties, they could leave out a greater number; that the Legislature ought to be convened to remedy the defect, or that the election should be held under the old and only valid law. The Governor did not follow this advice, and the election was held under the imperfect bill, which, in the opinion of many, makes it invalid, and may cause the State to lose her representation in the Forty-eighth Congress, until a perfect bill shall be passed and a good election had. The members-elect of the next General Assembly belong mostly to the Democratic party, and are divided, as to party, as follows:



Senate—Democrats .....	25
Republicans .....	8
Democratic majority .....	17
House—Democrats .....	74
Republicans .....	24
Greenbackers .....	1
Democratic majority .....	49
Democratic majority on joint ballot .....	66

EDUCATIONAL.—Under the laws of Tennessee, each county, city, and incorporated town is authorized to levy a tax for school purposes. In the towns and cities good graded schools have been established. The system of free schools is gradually becoming more efficient and more popular. The scholastic population this year was 549,179, of whom 408,364 are white and 140,815 are colored. The number of pupils enrolled was 207,680 white and 56,676 colored. The average number of days of free school instruction was 73.

The receipts for the year from the State were.....	\$121,488
The receipts for the year from the counties were.....	671,257
The receipts for the year from other sources were.....	149,630
Total.....	\$942,320

The expenditures during same time were \$821,883. The estimated value of school property amounts to \$1,078,794. The higher education of the youth of the State is well provided for at the Vanderbilt University, Nashville; Tennessee University, Knoxville; Wesleyan University, Athens; Cumberland University, Lebanon; University of the South, Sewanee; Southwestern University, Clarksville; Southwestern Baptist University, Jackson; and Fiske University, for colored students, Nashville. All the above, except the University of Tennessee, are controlled by some one of the religious denominations. Besides these, there are a number of colleges, academies, and well-established private schools. The State Normal College, at Nashville, is designed exclusively for the professional education of teachers and "practice in all grades of instruction." It receives its support from the Nashville University, from the State (\$10,000 in 1882), and from the Peabody Educational Fund. The contribution from this fund to the public schools of Tennessee, including the Normal College, has been \$12,800 during the year ending October, 1882.

STATE INSTITUTIONS.—The benevolent institutions sustained by the State are the School for the Blind and the Asylum for the Insane, at Nashville, and the School for the Deaf and Dumb, at Knoxville, all of which are liberally supported by the State, and are well managed. As is the case in so many other States, the capacity of the Insane Asylum is insufficient to accommodate the number of patients seeking admission. The total cost of the maintenance of the institution for the two years ending December, 1882, was \$139,952.27, or at the rate of \$69,976.13½ per annum—a rate of \$176.26 per patient per annum.

In the State-Prison of Tennessee the convicts are leased to individuals or corporations as in Georgia and other States. The report

of the Comptroller states that the receipts from the lessees of the Penitentiary for the two years ending December 20th, amounted to \$83,042.37. The existing lease will expire early in the next year. A commission was appointed in July, by Governor Hawkins, to consider the expediency and expense of removing the Penitentiary beyond the limits of the city, and report to the Legislature. Public opinion in Nashville is strongly in favor of the removal.

MINERAL WEALTH, MANUFACTURES, ETC.—The immense mineral wealth of Tennessee consists in her vast mines of iron, coal, marble, and zinc. From a small industry, marble-quarrying has grown so that in one county alone (Knox), capital to the extent of \$250,000 is employed in the business, and lesser sums are employed with great profit in several other counties. The income of the quarries in operation, for 1882, was a fraction under \$300,000. The marble is taken out in blocks, by means of drills, and is sold by the cubic yard. The demand for it, especially in the North, is extensive and rapidly increasing, and, notwithstanding the heavy cost of drilling, it is readily sold at prices highly remunerative to the quarry-owners. It is of a grayish-white color, and is as durable as Scotch granite. It can be highly polished, and in the process the various veins and tints of color are brought out. Analysis shows it to contain 98.486 of carbonate of lime, and tests prove its capacity to bear 12,000 pounds pressure to the square inch. From one quarry, owned and worked by Messrs. Tripp & Seaman, near Knoxville, specimens of forty varieties of marble have been obtained. Orders have been received for the shipment of large quantities to Pennsylvania and other Northern States. The zinc-works at Clinton, Anderson County, turn out 3,000 pounds of metal per day, and other zinc-works are about to be established at Knoxville. The coal area of the State is 5,100 square miles in extent, embracing the whole of the Cumberland plateau. Throughout this vast region there are from one to seven workable seams of coal. There are fourteen large mines, besides a number of less importance, now being actively worked. The total coal product of the State for the year exceeds 600,000 tons. The iron interests are being rapidly developed. Though the number of furnaces now engaged in the manufacture of iron is not nearly as large as in former years, the aggregate production is much larger. Four companies, having seven stacks, and using coke as fuel, are producing an aggregate of 500 tons of pig-iron per day. Five furnaces, which use charcoal for fuel, make about 112 tons daily. It is pretended by those interested in iron-making that iron can be made in Tennessee by the new processes, and put on the cars, at a price not exceeding the cost of the ore at Pittsburg, the difference being in the transportation of the raw material; and it is confidently anticipated that, when the manufacture of pig-metal

is fully developed, and the home market of rail-mills, rolling-mills, nail-mills, and foundries is created, the Tennessee furnaces can make iron from \$5 to \$7 per ton cheaper than those in Pennsylvania. The new hot-blast coke-furnace at South Pittsburg, owned by the Tennessee Coal, Iron, and Railroad Company, under the management of Mr. Warner, is reported to have made in June ninety-eight tons of iron in one day. This company has a capital of \$3,000,000, and owns three furnaces, with an average daily capacity of 200 tons. There is being built at Chattanooga a first-class 100-ton furnace, which will be in operation early in 1883. There are 4,326 manufacturing establishments in the State, employing a capital of \$20,092,845. In these factories there are employed 19,575 male adult and 1,196 female adult operators, and 1,764 children under fifteen years of age. The total annual wages

amount to \$5,254,775. The value of the materials consumed is \$25,710,125, and the value of the products is \$37,074,886. The unsettled financial condition of the State for many years past has undoubtedly retarded the development of manufactures; but the success of those which are in operation has proved that with her abundant stores of coal, iron, and timber, her immense water-power, and her contiguity to the great cotton-fields of the Southern States, manufacturing enterprise may be made profitable in Tennessee. At present, Nashville, Knoxville, and Chattanooga are the chief manufacturing places in the State.

**RAILROADS.**—The following tabular statement shows the length of the several railroads in the State; also the assessed value per mile; and the aggregate value of all the railroads in the State, compiled from the returns of the railroad assessors for September, 1882:

NAMES OF RAILROADS.	Number of miles.	Assessed value per mile.	Aggregate assessed value.
Alabama and Great Southern.....	4-85	\$11,998 75	\$58,170 00
Chicago, St. Louis and New Orleans.....	125-05	14,801 53	1,850,931 72
Chesapeake, Ohio and Southwestern.....	57-18	5,000 00	435,900 00
Cincinnati, Cumberland Gap and Charleston.....	40-17	5,275 71	211,925 53
Cincinnati Southern.....	1,514-86	17,686 46	2,678,867 75
Coal Creek and New River.....	1-00	3,800 00	3,800 00
Duck River Valley.....	96-67	3,551 00	130,215 05
East Tennessee, Virginia and Georgia.....	273-72	14,177 88	3,880,769 31
Knoxville and Augusta.....	16-81	3,204 88	52,263 40
Knoxville and Ohio.....	41-26	9,688 40	399,743 51
Louisville, Nashville and Great Southern— (Main stem and branches).....	428-59	14,221 49	6,095,187 01
Memphis and Charleston.....	108-00	12,405 02	1,339,742 45
Mobile and Ohio.....	128-84	15,670 00	2,006,141 67
Mississippi and Tennessee.....	13-06	17,081 95	222,437 27
Nashville, Chattanooga and St. Louis— (Main stem and branches).....	455-74	14,290 56½	6,512,707 28
Nashville and Tuscaloosa.....	21-79	2,908 21	63,370 00
Nashville and Florence.....	12-00	7,666 67	92,000 00
Nickajack.....	1-125	2,993 78	3,368 00
Oakdale and Cumberland Mountain.....	9-16	7,890 88	72,280 00
Rogersville and Jefferson.....	16-00	2,666 90	42,670 50
Tennessee Coal and Iron Railroad Company.....	24-00	10,000 00	240,000 00
Ship Island, Ripley and Kentucky.....	5-00	8,720 00	18,600 00
Western and Atlantic.....	22-00	27,519 07	605,419 67
Total.....	2,022-95		\$27,016,100 12

Average value per mile, \$13,354 80.

Increase of mileage over last report, 107-86 miles.

Increase of value over last report, \$10,640,205.72.

By the purchase from the State of Georgia of the Mason and Brunswick, and by its extension from Mason to Atlanta, thence to Rome and Dalton, Ga., the East Tennessee, Virginia and Georgia Railroad Company will soon control a continuous line from Norfolk, Va., to Brunswick. It also has branches from Knoxville to the Kentucky line, connecting with the Louisville and Nashville Railroad to Louisville, Ky., with the Selma, Rome and Dalton Railroad, to Selma, Ala., and Meridian, Miss., and with the Kentucky Central to Cincinnati; also a branch from Morristown to Paint Rock, on the North Carolina line, where it connects with the Western North Carolina Railroad through North Carolina to Wilmington. The total mileage directly under its control is 1,432 miles, but directly and indirectly it controls 2,170 miles.

**AGRICULTURE.**—Hitherto the agricultural methods in vogue in Tennessee have been very

primitive, and little attention has been paid to the fertilization of the soil or to improved modes of culture. Within a recent period marked improvement in this particular is perceptible, and when it becomes general the productive power of the arable lands in the State will be doubled. Recently some persons have turned their attention to the rearing of silkworms, and have succeeded encouragingly. The mulberry thrives in all parts of Tennessee, and the silk which has been produced is said to be of a very fine quality. The Swiss colonists at Grütli, on the Cumberland Plateau, have been especially successful in silk-culture. The colony at Rugby, which has been so often represented as a total failure, has been recruited by a number of thrifty families from Ohio, and is now showing signs of healthy vitality. Another thriving colony has been recently established at Allardt, in Fentress County, by fifty German families from Michigan. A small



German settlement has also been formed in Gibson County, which promises to be the nucleus of a much larger colony. Immigration, like every other enterprise involving the investment of labor and capital in Tennessee, has been materially retarded by the unsettled condition of the finances of the State, and the popular agitation to which it has given rise.

The Southern Sunday-School Association met at Tullahoma on September 17th, with a view mainly to the selection of a fixed place for the annual gathering of Sunday-school and Christian workers, in order to promote the education of the people in literature, arts, science, temperance, and all things conducive to their elevation religiously, morally, socially, and intellectually, after the manner, as far as practicable, of the meetings at Chautauqua. The selection of a location was left to a committee, who, after visiting several places, selected Monteagle, Tenn., in the vicinity of the University of the South, at Sewanee.

The Quadrennial General Conference of the Methodist Episcopal Church, South, met in Nashville, in May, and continued in session from May 3d to the 25th.

The following report of the Committee on Education, in reference to the educational wants of the negro population in the South and Southwest, was discussed and adopted:

Your committee have had under consideration that part of the bishop's address which relates to the claims of the negro population in the South and Southwest so far as their educational wants are concerned, and beg leave to submit the following report:

1. We note with pleasure the statement coming from so competent a source, that this people, upon whom our Church has in times past bestowed such labor, but who more recently in their changed relations have, for the most part, been turned away from us, are again becoming accessible to our ministry, and we heartily concur in the recommendation that the opportunity thus afforded to preach to their congregations be diligently improved.

2. To the claims of the Colored Methodist Episcopal Church in America, which sustains a peculiar and providential relation to the Methodist Episcopal Church, South, the address invites especial attention, chiefly for the purpose of determining what may be done by us to assist them in obtaining facilities for providing themselves with suitable pastors and teachers of their own race. They have no institution under their management for the education of those who are to occupy their pulpits and preside in their schools. Their preachers and teachers, if educated at all, must, for the most part, be educated by those who are not in sympathy with their organization. If they are to make any progress, or even to maintain their existence, they must provide for the education of those who are to take charge of their schools and religious congregations. Of themselves, they are not to do this; they have neither the money to establish schools nor the men competent to conduct them, and they look to us for aid.

As what we have done for them in setting them up for themselves creates the necessity of doing more for them, so this fact justifies the expectation on their part that we have not already done or are not now doing enough. Our people in the South have cheerfully borne their share in providing by general and special legislation for the educational wants of the colored race. We have endeavored to encourage in every way the promotion of common-school education among

them. But in the secular schools, their preachers and missionaries can not get the training essential to their work. The Colored Methodist Episcopal Church, which looks especially to us for encouragement and aid, is in pressing need at this point; therefore—

*Resolved*, That our bishops be authorized and requested to appoint, in consultation with the bishops of the Colored Methodist Episcopal Church, in America, a preacher or layman of our church, properly qualified for the work, who shall be a commissioner of education in aid of the Colored Methodist Episcopal Church in America, whose duty it shall be to solicit subscriptions, contributions, donations, and bequests, from whatever source he may find available, for the purpose of creating an educational fund for the benefit of said Colored Methodist Episcopal Church in America.

*Resolved*, That our bishops be also authorized and requested to appoint three members of our Church, who, together with the Commissioner of Education and three members of the Colored Methodist Episcopal Church, to be appointed by their bishops, shall constitute a Board of Trustees, for the custody and control of their educational fund when it shall have been raised.

*Resolved*, That the Commissioner of Education, herein provided for, be appointed a committee of one to see that the said Board of Trustees be completed in legal form by securing proper acts of incorporation.

All of which is respectfully submitted:

W. P. HARRISON, Chairman.

A proposition was made to change the name of the "Methodist Episcopal Church, South," to the "Methodist Episcopal Church in America," which gave rise to a long debate. On motion of the venerable Dr. J. B. McFerren, the matter was disposed of by directing that it be "referred by the bishops to the several annual conferences during the ensuing four years, and that they report the result of the note to the General Conference of 1886 for ratification."

The College of Bishops having been reduced by death and by the infirmities of some of the older incumbents, the Conference decided to elect five new bishops. Accordingly, Rev. Drs. A. W. Wilson, of the Baltimore Conference; John C. Granberry, of Vanderbilt University; Robert Kennon Hargrove, of the Alabama Conference; Linus Parker, of the Louisiana Conference; and Atticus G. Haygood, of the North Georgia Conference, were elected. Dr. Haygood declined to accept the office. The Conference determined not to elect any one in Dr. Haygood's place. The other four bishops-elect were ordained with impressive ceremonies at McKendree Church, on May 18th. The College of Bishops, as it now stands, consists of Rev. George F. Pierce, D. D., Rev. Hubbard H. Kavanaugh, D. D., Rev. Holland N. McTyeire, D. D., Rev. John C. Keener, D. D., Rev. A. W. Wilson, D. D., Rev. J. C. Granberry, D. D., Rev. R. K. Hargrove, D. D., and Rev. Linus Parker, D. D. Bishop Robert Paine, who was present at the Conference, though in very feeble health, died at his residence at Aberdeen, Miss., late in the autumn. During the session of the Conference the distinguished preacher, theologian, and author, Rev. Dr. Thomas O. Summers, of Vanderbilt University, died, after a short illness, at his home in Nashville.

The Eleventh Quadrennial General Conference of the Methodist Episcopal Church, South, will take place at Richmond, Va., in May, 1886.

**TEXAS. STATE OFFICERS.**—Governor, O. M. Roberts; Lieutenant-Governor, L. J. Storey; Secretary of State, T. H. Bowman; Treasurer, F. R. Lubbock; Comptroller, W. M. Brown; Attorney-General, J. H. McLeary; Commissioner of the General Land-Office, W. C. Walsh; Commissioner of Insurance, Statistics, etc., A. W. Spaight; Adjutant-General, W. H. King. United States Senators, Richard Coke and S. B. Maxey. Members of the Forty-seventh Congress: First District, John H. Reagan; Second District, D. B. Culberson; Third District, Olin Wellborn; Fourth District, Roger Q. Mills; Fifth District, G. W. Jones; Sixth District, Columbus Upson. Members-elect of Forty-eighth Congress: First District, Charles Stewart; Second District, John H. Reagan; Third District, James H. Jones; Fourth District, D. B. Culberson; Fifth District, John W. Throckmorton; Sixth District, Olin Wellborn; Seventh District, Thomas Ochiltree; Eighth District, J. F. Miller; Ninth District, Roger Q. Mills; Tenth District, John Hancock; Eleventh District, S. W. T. Lanham.

**GROWTH OF THE STATE.**—No stronger proof can be afforded of the wonderfully rapid growth of Texas during the past decade than that given by the last Congressional Apportionment Act, under which, at the election on November 7th, she was entitled to elect five additional Representatives in the Lower House of the Federal Congress. And not only has she grown in population, but her advance in everything that constitutes the material prosperity of a people has been equally rapid and equally great. In a vast territory which a few years ago was only accessible to the traveler on horseback, and at a serious risk of life from the tomahawk of the Comanche and the lawlessness of the desperado, the whistle of the locomotive, the church-bell calling to divine worship, the voice of the school-teacher, the hum of the machine-shop are now heard in every direction, and millions of acres of fertile lands, as profitless as if they were a desert, are now dotted with the homes of thrifty husbandmen, rewarding with abundant crops the intelligent industry which has subdued them to civilization. Where "they might take who had the power, and they might keep who can," was the law of property; where personal rights were defended only by the pistol and the rifle, and where the name of God was never heard but to be blasphemed, law and order now prevail, and the mandates of justice and of the preached word are heard and respected. In no State are the revelations of the last census as startling in their proofs of progress as they are in Texas.

**FINANCIAL CONDITION.**—In consequence of the increased valuation of property, the close collection of taxes, and the generally increased prosperity of the country, the receipts of the

State Treasury have exceeded the disbursements for the year. In order that this excess might not remain unproductive in the Treasury, while the outstanding bonded debt was drawing regular interest, the surplus revenue was used to purchase and cancel State bonds. In the reduction of the bonded debt, the appropriations made by the Legislature for sinking fund, surplus revenue, and a part of the proceeds of sales of public lands, have been used whenever a purchase on favorable terms could be made. No part of the above funds can be used for any other purpose than to retire outstanding bonds—the sinking fund being subject to investment by the Treasurer, and the surplus revenue by the Treasurer, with the advice and consent of the Governor and Comptroller. The total amount of bonds retired and canceled, according to the Treasurer's report of September 1, 1882, is \$958,290. The total outstanding bonded debt of the State on December 31st amounted to \$4,037,730, of which \$1,712,200 bear 6 per cent interest; \$1,254,000 bear 7 per cent; \$1,068,900 bear 5 per cent; and \$2,630 bear 4 per cent. Of this amount the special funds in the Treasury—the school funds, the university, and other funds—hold \$2,547,100, the interest on which is annually paid to those funds for the benefit of the State, leaving \$1,492,530 in the hands of individuals. The public credit is now so high that it has not been possible for the State to buy her 6 per cent bonds at less than 40 per cent premium. The bonds retired have been chiefly those which had the longest time to run to maturity, and bearing the highest interest. In the past three years the debt has been reduced, in round numbers, \$1,400,000, and the annual interest has been diminished \$140,000. The reduction in interest during the year has been \$65,950.60.

The balances in the Treasury to the credit of the several funds, on December 31, 1882, are as follow:

State revenue (currency).....	\$500,121 96
Common schools, university, asylums, and other special funds (currency).....	888,827 92
Common schools, university, asylums, and other special funds (bonds).....	4,927,510 12

Total balances in currency and bonds..... \$6,316,460 00

The ordinary necessary expenses of the State government for one year are as follow:

Executive office.....	\$29,700 00
State Department.....	24,785 00
Treasury Department.....	18,800 00
Comptroller's office.....	47,850 00
General Land-Office.....	55,060 00
Department of Insurance.....	10,800 00
Fish Commissioner.....	4,700 00
Adjutant-General.....	96,350 00
Attorney-General.....	11,260 00
Judiciary Department.....	376,525 00
Deaf and Dumb Asylum.....	85,950 00
Blind Asylum.....	27,050 00
Lunatic Asylum.....	55,000 00
Public schools—one fourth revenue.....	491,240 00
Quarantine.....	35,000 00
Interest on public debt.....	244,062 00
Sinking fund.....	50,754 00
Capitol-Building Commission.....	10,660 00

Total..... \$1,668,446 00



The Comptroller's estimate of annual revenue, at present rate of taxation (thirty cents on \$100 of value), *ad valorem*, poll and occupation taxes, based on the actual assessment for 1882, is as follows:

Ad valorem tax assessed for 1882.....	\$1,235,844 00
Revenue poll-taxes.....	146,518 00
Occupation taxes.....	626,000 00
From redemption of lands sold by State.....	50,000 00
Collections from insolvents.....	9,000 00
Ad valorem tax in unorganized counties.....	36,000 00
Special taxes.....	100,000 00
Office fees from several departments.....	100,000 00
Total.....	\$2,303,862 00
Expenses of assessing and collecting.....	338,891 00
Total net revenue.....	\$1,964,971 00

The Comptroller remarks, in reference to the above: "We may safely assume that our annual revenue, now flowing into the Treasury under our regular government system, is in net amount \$2,000,000. The annual increase, the rates of taxation and regularity of collections remaining constant, there will be at least 10 per cent annual increase in the *ad valorem* tax, or about \$125,000."

The present assured financial prosperity and the relief from the embarrassments which beset the government of Texas prior to 1879 are attributed chiefly to the provision of the Constitution of 1876 requiring the annual sale of lands for taxes. Since 1879 the State has had annually increasing surplus balances, notwithstanding successive reductions of taxes, and now the revenue system is so perfected that an almost exact calculation may be made as to the annual income, and expenses may be incurred under the guidance of settled experience. In financial estimates it is very difficult to determine with perfect accuracy the excess of cash in the Treasury, as an unexpended and reserve balance at any particular period; because there may be outstanding unpaid warrants that have not been presented for payment, representing, perhaps, large sums, and other numerous small considerations confuse as to exact results in estimates. But, by comparing the condition of the Treasury on August 31st, which showed a balance of \$526,545.62, and the balance on December 31st—\$500,121.96—it is fairly deducible that, if a balance fluctuating from \$500,000 to some sum in excess remains constant during a period of several months—all expenses of the government being promptly paid—an actual excess of revenue over expenditure of at least \$500,000 may be counted on. If, then, it be assumed that the further revenues for the year 1883 shall be sufficient to support the government under existing appropriations, and that all taxes for the year shall be collected and paid into the Treasury, amounting, according to the Comptroller's estimate, to \$2,000,000, there would be, on December 31, 1883, the increase of unused balance in the Treasury, of the difference between this amount and the aggregate of appropriations. To illustrate this mode of determining the cash balance in excess in December of next year:

Excess of cash on hand December 31, 1882.....	\$500,121 96
Receipts for 1883.....	\$2,000,000
Ordinary expenses of the government for 1883.....	1,668,446
Excess of receipts over disbursements.....	886,554 00
Total excess, December 31, 1883.....	\$886,775 96

This estimated balance will necessarily vary in proportion as the appropriations may be increased or diminished; but it shows to what extent extraordinary appropriations may be made without the necessity of borrowing money.

The policy of investing the special funds belonging to the public free schools, university, and asylums, as they accumulate from time to time, in State bonds purchased at 40 per cent premium, is seriously questioned, and by many earnestly condemned as a permanent loss to those funds; because when the period is reached when all the money that can belong to those special funds shall be deposited in the Treasury, if, in the process of investing those funds, there be consumed a part of the permanent funds in payment of premiums on the interest-bearing securities, the final consumption of the permanent fund will be inevitable. It is suggested that this could be obviated by the passage of a law directing the premium and costs paid for the interest-bearing securities in which the investments are made, to be paid out of the annual available fund, and not the permanent fund of those institutions. As stated on November 6, 1882, 500 State bonds, of \$1,000 each, bearing 7 per cent interest, belonging to the public schools, etc., were purchased at 40 per cent premium:

Bonds purchased.....	\$500,000 00
Premium paid.....	200,000 00
Commissions, etc.....	644 60

Total expended..... \$700,644 00

The following is a statement of the assessments of property in the State for 1882:

	Number.	Value.
Land, acres.....	94,157,501	\$177,760,740
City or town lots.....	.....	64,285,584
Railroads, miles.....	4,216	80,410,350
Telegraph, miles.....	7,639	280,243
Land certificates, acres.....	701,091	111,580
Steamboats, sailing-vessels, etc.	804	428,291
Carriages, etc.....	168,291	5,829,974
Tools, implements, machinery, etc.....	.....	5,804,266
Materials and manufactured articles.....	.....	408,382
Horses, cattle, sheep, hogs, etc.	.....	72,805,214
Goods and merchandise.....	.....	22,811,922
Money on hand.....	.....	9,794,312
Miscellaneous property.....	.....	22,199,618
		\$411,925,476
Add approximate assessment of lands in unorganized counties owned by non-residents.....	.....	8,000,000
Total value of property....	.....	\$419,925,476

The State tax is 30 cents on the \$100 of value. The county tax is limited by the Constitution to one half of the State tax. The poll-tax is \$2, of which \$1 and one fourth of the *ad valorem* tax constitute a part of the available school fund. The average value of lands is

\$1.89 per acre. The assessment of 1882 shows an increase of 11½ per cent over that of 1881. The special tax on occupations yielded, during the fiscal year, \$567,184.60.

**RAILROADS.**—Six or seven years ago the railways in Texas were comparatively few and short. Now, in 1883, she has 5,908 miles of railroad, running in every direction, furnishing highways for the transportation and markets for the sale of her produce and stock, bringing between \$30,000,000 and \$40,000,000 into the State, and opening to civilization and productive industry millions of acres of land, previously penetrated only by the savage or the fugitive from justice. Of the number of miles of railroad given above, 4,926 have been built within the last ten years; and 1,461 miles, costing \$44,525,000, within the year ending September 1st. The following are the railroad lines, and their extent, in operation in the State:

	Miles.
Missouri Pacific and Texas Pacific Railroads.....	590
International and Great Northern.....	837
Texas and Pacific.....	972
Galveston and Houston.....	50
Galveston, Harrisburg and San Antonio, and Mexican and Pacific Extension.....	985
Houston and Texas Central.....	788
Gulf, Colorado and Santa Fé.....	584
Texas and St. Louis (narrow gauge).....	805
Texas-Mexican (narrow gauge).....	176
Houston, East and West Texas (narrow gauge).....	125
Fort Worth and Denver City.....	114
Texas and New Orleans.....	105
Sabine and East Texas.....	104
New York, Texas and Mexican.....	92
Gulf, West Texas and Pacific.....	66
Austin and Northwestern (narrow gauge).....	60
Texas Western.....	57
Texas Trunk.....	35
Rio Grande and Pecos.....	26
Rio Grande.....	22
Texas Transportation Company.....	8
Atchison, Topeka and Santa Fé (in Texas).....	8
Missouri, Kansas and Texas (in Texas).....	5

Total miles of railroad December 1, 1882..... 5,974

Suit was instituted in the District Court, last March, by the State against the International and Great Northern Railroad Company, seeking a forfeiture of its charter, and of the land grant of twenty sections per mile for the road between Jefferson and Laredo, for alleged failure to construct the road as required by the charter—that is, “at the rate of at least forty miles each year, or of eighty miles every two years.” The court decreed that the land grant be adjudged forfeited upon all the railroad between Jefferson and Laredo, not completed at the filing of the suit, viz., from Austin to Laredo, and from a point north of Longview to Jefferson.

**THE CAPITOL.**—The new Capitol, now in process of construction at Austin, will be one of the largest and handsomest public buildings in the United States. It will be built of fossiliferous limestone, found in large quantities in the immediate vicinity. The interior will be finished with various kinds of Texas marble. The basement-floor will consist of fifty-one rooms, to be occupied by the Comptroller's and Treasurer's department, specie-vaults, and heating apparatus. The second floor will be

set apart for the Senate and House of Representatives, Governor's reception-rooms, portrait-gallery, library, committee-rooms, etc. The third floor will be occupied by the State House and judicial officers, court-rooms, judges' rooms, Attorney-General's and Marshal's office, etc. The fourth story will consist of a number of rooms not yet designed for any specific purpose. The whole will be surmounted by a dome, which, it is said, will be the highest in America. The estimated cost of the material and labor will be \$1,480,000; but it is supposed that it will cost fully \$2,500,000 to complete it. The contractors are to receive for the building, when finished according to the plans, 3,000,000 acres of land, situated in the extreme northwestern part of the State, in what is known as the “Pan-handle.” The dimensions of the building, at greatest measure, are 566½ feet long by 288 feet 10 inches wide. The dome will be 311 feet high. The excavations were commenced on February 1st. The contractors—the Rock Island (Illinois) Syndicate—have agreed to have the building “fully completed and delivered on or before January 1, 1888.” The lands to which they will be entitled when the Capitol is completed could be readily sold for \$1.50 per acre, so that really the cost of the buildings, at the present price of the land, will be \$4,500,000, and it is probable that by January, 1888, the lands will be worth fully fifty per cent more than at present.

At the extra session the sum of \$50,000, and the material of the old burned Capitol, were appropriated to purchase or erect suitable temporary buildings for the Executive, judiciary, and Legislature of the State. Just after the stone-work of the building was finished, and the roof placed upon it, a severe wind and rain storm caused a large portion of the walls, which the contractor had failed to bond, to fall. When this happened, \$27,300 of the \$50,000 had been already expended, leaving only \$22,700 to repair the damage and complete the building. The contractor went forward, finished the work, and now trusts to the next Legislature to reimburse him.

**BOUNDARY-LINE.**—The long unsettled question as to the boundary-line between Northern Texas and the Indian Nation has been revived by the researches reported by Mr. John M. Swisher, acting as agent on the part of Texas. The dispute arises, it is said, from the fact that the United States Commissioner recognized the *South Fork* of the Red River as the continuation of that stream, while the Texas authorities have always held that the *North Fork* is the true river. Several successive Legislatures of Texas have affirmed the claim of the State to the territory known as Greer County, which lies southeast of the Pan-handle, between the North and South Forks of Red River, and it is asserted in support of this claim that, although the bed of the South Fork is more extended than that of the North Fork,



it is often dry, while the latter has an unceasing flow of water. Congress has been asked to settle the boundary by law. The fact that Indian reservations have been defined up to the line of the North Fork, that none have been laid off south of that line, in Greer County, and that that county has been set apart by Texas statutes for specific purposes, would seem to argue that the General Government has doubts as to the validity of its claim. The Legislature, at its extra session, provided for the settlement of the controversy by appointing a commissioner to trace the boundary-line in conjunction with a commissioner on the part of the Federal Government.

**EXECUTIVE AND LEGISLATIVE AFFAIRS, ETC.**  
—The Governor called the Legislature to meet in extra session on April 6th, to reapportion the State into congressional districts, the Apportionment Act of Congress having given Texas five additional Representatives; to provide a temporary Capitol, the old Capitol having been accidentally burned in November, 1881; to authorize necessary improvements in the Lunatic Asylum; to make provision for a new lease of the penitentiaries at the expiration of the existing lease at the close of this year; to take action as to the government and funds of the University of Texas and its branches; to legislate for the disposition of the public lands; to pass laws for the regulation of the railroads in the State; and to reduce taxation as far as may be consistent with the support of an efficient State government.

The convention of the Democratic party met at Galveston, in July, to nominate State officers. The choice fell on John Ireland for Governor; Marion Martin for Lieutenant-Governor; W. J. Swain for Comptroller; F. R. Lubbock for Treasurer; John D. Templeton for Attorney-General, and W. C. Walsh for Commissioner of the General Land-Office, all of whom were elected by large majorities. The congressional elections resulted in the return of ten Democrats and one Independent (Mr. Ochiltree).

**STATE AFFAIRS.**—The political contest was between the Democrats proper and a coalition of Republicans, Greenbackers, and Independents. The failure of the Galveston Convention to renominate Governor Roberts disaffected some Democrats and caused Mr. Ireland to run behind the rest of the ticket. The greatest interest was felt in the congressional contest between Hancock and Davis in the Tenth District, Finlay and Ochiltree in the Seventh, and Culberson and Dohoney in the Second. The wool-growers, who are in favor of a high protective tariff, opposed Mr. Hancock, who was pronounced in favor of a "tariff for revenue only." His opponent, Mr. E. J. Davis, Governor of Texas in the time of reconstruction, was pledged to support protection on wool and woolen goods. The canvass was animated and energetic, but generally peaceable.

The creation of the Commission of Appeals,

to aid the Supreme Court and the Court of Appeals in civil cases, has produced a marked improvement in the greater dispatch of judicial business, thus preventing the unreasonable delays which have been so long a just cause of complaint. The inferior courts, too, have been much improved by the appointment to the bench of lawyers of greater ability, experience, and integrity.

In the exercise of Executive clemency, Governor Roberts has been controlled by the purpose to make good conduct and reformation in the Penitentiary the main ground of commutation of the penalty or of pardon, teaching the convict to rely on self-effort rather than outside influence. On account of the facility afforded criminals to cross the Rio Grande to escape arrest and prosecution, the Governor constituted all the county and district judges whose jurisdiction reached that river "extradition agents" on the part of Texas; and, upon communicating the fact to the Governors of the border States of Mexico, assurances were received that those officials would take similar action on their side of the line. Since this was done no trouble has occurred. The Frontier Battalion and Special Police Force have done good service in arresting criminals and preserving peace and good order in the western and southwestern parts of the State. The Indian depredations have practically ceased altogether. The expense of this force has been reduced during this year to \$60,000.

The quarantine regulations for the protection of the people against yellow fever have been systematized and much improved, while all proper precautions have been taken not to obstruct commercial intercourse with tropical countries.

Mr. A. W. Spaight, the Commissioner of Insurance Statistics and History, prepared and published during the year a very valuable and interesting book upon the "Resources, Soil, and Climate of Texas," in which every county is fully described. An admirable descriptive map is affixed to the work. Existing law authorizes the Governor to appoint a "State Engineer," who shall have the right to compel all railroads that connect with each other in the State to make their connections regular and proper, so as to accommodate the traveling public on said roads, and the right and power to compel the railroad companies to draw the passengers and freight of each other on their respective roads; and, upon a refusal to comply, the Engineer is empowered to take charge of the contumacious road and its rolling-stock, and report it to the Governor, who shall then order that the road shall be run for the benefit of the State, until arrangements are made for compliance with the law. But, as the Legislature made no appropriation for the payment of the salary and expenses of the Engineer, or for the cost of taking charge of and operating a railroad, the law is a dead letter. Several of the Texas railroads are reported to be in

default in the payment of the interest on their indebtedness to the Public Free School Fund. The account of the railroad companies with the Permanent Common-School Fund is computed in the Comptroller's report up to May next year, and is as follows:

COMPANIES.	Amount of debt.	Interest due.	Sinking fund.
Houston and Texas Central Railroad..	\$511,250 99	\$15,333 42	\$5,112 80
Washington County Railroad.....	86,655 90	20,797 34	6,932 41
Galveston and San Antonio Railroad.	506,252 32	15,187 56	5,062 52
Texas and New Orleans Railroad....	506,465 87	15,193 97	5,064 65
Texas and Pacific Railroad.....	172,773 75	5,133 31	1,727 13
	\$1,733,428 83	\$71,700 50	\$23,900 11

The Washington County Railroad has been in default since November 1, 1879.

**EDUCATIONAL.**—The permanent fund of the public free schools has increased by the sale of its lands from \$1,629,000 to \$5,361,000 on December 31st, with a probable increase within a short period of upward of \$1,000,000 by the sales of the reserved lands. The lands belonging to the Permanent Common-School Fund, as estimated by the Commissioner of the General Land-Office, amount to 33,000,000 acres. In addition to this, four leagues (17,712 acres) of land are set apart to each county for school purposes, aggregating 4,002,912 acres. The annual interest on purchase-money notes received for land belonging to the available school fund is \$227,390.86. The estimated annual amount set apart for the support of the public schools is \$491,240, derived from one fourth of the general revenue, all the annual poll-tax levied for school purposes, and all the interest on the Permanent School Fund, including bonds and other interest-bearing indebtedness, belonging to the Permanent School Fund.

The amount apportioned in cash to the several counties, cities, and towns, for the scholastic year was \$1,086,273. The free schools have been much improved during the year. The duration of the term of instruction has been increased, and the scholastic population, between the ages of eight and fourteen years, shows an increase of 10 per cent, being, in 1882, 295,344. Two normal schools have been established, one for white pupils—the Sam Houston Normal Institute at Huntsville, Waller County—and one for colored pupils, the Prairie View Normal School, near Hempstead, Walker County. At these schools, one hundred and fifty-five white and forty-three colored students have been trained and educated to become teachers in the public free schools, and their expenses for tuition, board, books, etc., have been defrayed by the State. The Peabody Educational Fund has contributed liberally to both these schools. Normal institutes have been held during the summer, which have been numerously attended by the teachers throughout the State. It is proposed to offer for sale,

at a long credit, the lands set apart for educational purposes, fixing the minimum price at two dollars per acre. The failure of the Legislature to adopt the recommendation of Governor Roberts to raise the minimum price of these lands from fifty cents to at least one dollar per acre, has resulted in a sacrifice of millions of acres of these school lands. Since the adjournment in May of the special session of the Legislature, which refused to pass a bill to protect these lands, up to December 31st, applications have been filed for 6,350,480 acres, at fifty cents per acre. It appears from the report of the General Land Office, made in March, that the public lands, including reservations, are barely sufficient to meet the outstanding land-scrip. An idea may be formed of the lavish way in which these lands have been granted, from the single instance of the grants to the Texas and Pacific Railroad Company, amounting to nearly 5,000,000 acres of land, now selling for from one dollar to five dollars per acre, according to location and quality. The commissioner estimates the vacant and unappropriated lands at 15,953,730 acres, and the certificates as calling for 22,900,480 acres, leaving a deficiency of public land of 6,946,750 acres.

The University of Texas comprises the main college at Austin, the Medical College at Galveston, the Agricultural and Mechanical College at College Station, on the Houston and Texas Central Railroad, in Brazos County, and a branch for colored students, for the establishment of which initial steps have been taken. The munificent endowment of this as yet inchoate institution consists of 1,219,900 acres of the public lands, cash, land notes, and State bonds, amounting to \$503,364.30, provided by the Constitution and laws for its maintenance, and the proceeds of the sale of the public lands donated to the Agricultural College by the Federal Congress in 1862, amounting to \$209,000. The first of a number of buildings on a grand scale is now in course of construction, and, it is expected, will be completed by the middle of the summer of 1883, so that the college can be put in operation by September of next year. The corner-stone of the building was laid by the Masonic order with impressive ceremonies, on November 22d, in presence of the Governor, the other prominent officials, and a large concourse of people from all parts of the State. The structure will occupy the center of the plateau set apart for the university-grounds. The main frontage will be toward the south, with a length from east to west of 280 feet, and a depth from south to north of 195 feet, exclusive of wide porticoes. The entire building will be four full stories in height, providing ample and well-arranged rooms for all the purposes of a college of the first class.

When inaugurated, the law of its creation requires that male and female students shall be admitted on equal terms, and that no other charge shall be made than an initiation fee,



which is limited to \$30. It is believed that the present endowment of the university will be largely increased by additional appropriations, so as from the beginning to insure the establishment of a university of the first class on a firm foundation. The Agricultural and Mechanical College, formerly a literary high-school, has been made an agricultural and mechanical college in reality, instructing the students in the science and art of agriculture, in the mechanic arts, and in natural science generally. Tuition is free, and board is given at the low rate of \$130 for the scholastic year; and, in addition, the board expenses and books of 93 students, selected by competitive examination from the 31 senatorial districts, are paid by the State. The number of matriculants on December 31st was 200. The present outfit of this college is very insufficient, both in farm machinery and in stock. The directors of the institution, in their last report, point out these deficiencies, and ask for an appropriation of \$50,000 to purchase a well-stocked and fully equipped farm, and additional tools and mechanical appliances for the workshops. Means are also asked to provide quarters for 200 additional students. The State Democratic Convention, at Galveston, adopted the following in relation to the public schools as a part of their platform:

We favor the fullest education of the masses, white and colored, in separate common schools, and the advanced education of the youths of the country in our higher schools and State University. We favor the maintenance of normal schools for the instruction of teachers.

We favor the submission to the people of a constitutional amendment authorizing the levy and collection of a special school-tax, separate from the general revenues, to the end that an efficient system of public free schools may be maintained, and that the State tax may be reduced to the actual necessities of the State government.

We favor the protection of the public school lands of the State from waste and sacrifice, and pledge ourselves to secure returns from said lands, commensurate with the real value of the same.

There are a number of well-conducted and numerously attended colleges—mostly denominational—and private academies throughout the State, the principal of which are, the Methodist College, at Fredericksburg, Gillespie County; Marvin College, at Waxahachie, in Ellis County; male and females colleges at Goddard and Sherman; Woodland Female College, at Paris; Trinity University (Presbyterian), at Tehuacana Hills, and Polytechnic Institute, at Mexia, Limestone County; Waco University (Baptist), and Female College (Methodist), at Waco; Southwestern University (Methodist), and Round Rock College, at Georgetown, Williamson County; and Soule University and Chapel Hill Female College in Washington County. The Methodist denomination are about to establish a college at San Saba.

STATE INSTITUTIONS.—There are two State Penitentiaries, one at Huntsville, Walker County, and one at Rusk, Cherokee County. The

policy of the Legislature with regard to these institutions is to provide as far as practicable for the accommodation and profitable employment of the convicts *within* the walls of the Penitentiary, and abandon, gradually, the practice of leasing the convicts for *outside* labor. At the close of this year, the two penitentiaries were leased for fifteen years from the 1st of January, 1883, for \$10,000 per annum for each, commencing with 300 convicts at Rusk, to be increased in equal numbers each year, until the number reaches 800 at the end of the third year, and with 400 convicts at Huntsville, increasing to 600 by the end of the third year. About 900 convicts, in numbers not less than 60, were leased on August 15th for five years to individuals for work on farms, at an average of \$15 per month for each convict, yielding, after paying cost of guards, etc. (about \$9), a net revenue of \$6 per month for each convict. The lessees of the two penitentiaries assume and agree to carry out these contracts for farm-labor made by the State. The convicts are said to be well fed, clothed, and lodged, to be humanely treated, and worked for not more than ten hours per day. The net proceeds of the lease of the convicts, according to the last report made in 1882, amount to \$255,134.47.

The Asylum for the Education of the Blind, and the Institution for the Deaf and Dumb, at Austin, have been well managed and efficient, as far as the means appropriated for their support and enlargement would permit. The Asylum for the Insane is totally inadequate to accommodate even one half the applicants for admission, who are now confined in the jails, homes, and log-cabins in all parts of the State. Credible persons state that in many places, families too poor to hire nurses or keepers have confined their insane relatives in pens, feeding them, like wild beasts, through the spaces between the logs, and that many of these unfortunate people have perished from want of proper care and ordinary good treatment.

One hundred and one thousand, nine hundred and four acres of the public lands have been set apart to each of the State asylums—Deaf and Dumb, Blind, Insane, and Orphans' Asylum.

EXPORTS OF PRODUCE.—The following is an exhibit of the value of the products of Texas actually exported during the year ending August 31, 1882:

Cotton, 878,854 bales.....	\$50,094,678
Wool, 22,299,652 pounds.....	5,128,919
Hides, 13,572,795 pounds.....	1,627,785
Cattle, 681,367 head.....	16,654,070
Horses and mules, 43,724 head.....	1,098,100
Cotton-seed, cake, and oil.....	2,485,740
Sugar and molasses.....	725,394
Miscellaneous.....	8,427,568
	\$81,238,554

The falling off in the cotton-crop of 1881-'82, as compared with the previous year, amounted to 381,393 bales.

The cattle, sheep, and wool interests of Texas are second only to those of agriculture, and

embrace directly and indirectly fully one third of the State. Within the year, with improved facilities of transportation and the demands of an increased population, the value of cattle has doubled. At present sheep are only raised in Texas for their wool—very few for mutton. This is caused by the cost of transportation. It is estimated that there are now 7,000,000 sheep in the State; hence, allowing four acres to each sheep, 28,000,000 acres of land are used as sheep-walks. The wool-clip of this season received at San Antonio was 5,700,000 pounds. Great improvements have been made within the last twelve months in the management and handling of cattle in Texas, and the grade is constantly improving by the introduction of blooded stock. The present price of beef-cattle ranges from \$25 to \$35. Ten years ago the same class of cattle were sold for from \$12 to \$15.

The business of the port of Galveston for the commercial year ending August, 1882, has been much greater than was anticipated. The partial failure in the corn-crop and a heavy falling off in the cotton-crop were calculated to lessen the volume of commercial transactions. While the money value of the State's exports for the year is in excess of that of the year previous, so much of the surplus went forward to purchase meat and breadstuffs, stringency in commercial matters was expected; but the year has passed without any disaster worthy of record. Of the 878,854 bales of cotton produced in the State, 476,891 were exported from Galveston. Though the sugar-crop was light, the receipts of consignments from plantations direct to Galveston have been larger than in any previous year, amounting to 8,000,000 pounds. The consignments of wool amounted to 218,280 pounds. Of molasses, 255,598 gallons were received. The trade of the city of Houston during the year amounted in value to \$22,786,481.

TROLLOPE, ANTHONY, an English novelist, died December 6th. He was born April 24, 1815. His mother was the talented authoress of "Widow Barnaby," whose caustic reflections on American manners, written after a long residence in the United States, did much to protract the estrangement between American and English society. Anthony Trollope was educated at Winchester and Harrow Schools. He obtained a clerkship in the Post-Office, with which department he was connected for the best part of his life. His business faculty and power of work were so remarkable that he pursued an honorable career in the public service parallel to his assiduous and prolific literary activity. He took a prominent part in the development and direction of the postal service in Ireland, and in later life was intrusted with the negotiation of intricate postal arrangements with various European governments. He commenced to write novels as a distraction from his official labors. Of his earlier novels there were republished and acknowledged the

"Macdermotts of Ballycloran" and the "Kellys and O'Kellys," published in 1847 and 1848. The first work which brought him fame and substantial pecuniary returns was "The Warden," followed by a continuation, "Barchester Towers," usually accounted his finest production. These are life-like pictures of the social and domestic life of the English clergy. They were followed by a stream of others, all in the same realistic vein, and nearly all treating of the life of the upper classes of English society, gradually extending in their range of subjects from the clergy to the country gentry and nobility, and then to the dissipations of town, and in his later novels, with less success, to political society. Characters which he drew with pains and success he often reintroduced in succeeding works. His remarkable powers of observation, which enabled him to write with accurate knowledge of the daily habits and professional practices appertaining to the various classes of people which he introduced in his fictions—clergymen, country gentlemen, sportsmen, officers, lawyers, doctors, merchants, or politicians—enhance the air of reality which pervades his novels. Anthony Trollope was probably the most prolific writer of fiction in the English language. His style and method are the same throughout, though the merits of his works vary widely. The quality of each individual work is remarkably even, those which were originally well conceived being worked up with care, and not marred through errors in dramatic judgment or negligence in literary workmanship. The most widely read of his novels, besides those mentioned above, are "Dr. Thorne," "The Bertrams," "The Three Clerks," "Castle Richmond," "Framley Parsonage," "Orley Farm," "The Small House at Allington," "Rachel Ray," "Miss Mackenzie," "The Claverings," "The Last Chronicle of Barset," "The Duke's Children."

Although Trollope dwelt more on the external aspects of society, some of his characters, such as Mrs. Proudie, the Warden, Rev. Mr. Crawley, Palliser, Dr. Thorne, the Duke of Omnium, Scatcherd, etc., are as clearly conceived and strongly drawn types as those of any of the analytical novelists. Besides his double work as author and official, Anthony Trollope was a keen hunter, and found leisure to indulge freely in this British pastime, and also to travel when his strength needed recruiting. His practical knowledge and power of observation enabled him to write, after his brief trips to America, Australia, and South Africa, some of the best books of travel, particularly his volume on "The West Indies and the Spanish Main." His biographical studies of "Julius Cæsar" and "Cicero" were less within the scope of his acquirements. He wrote also an admirable memoir of Lord Palmerston.

TUBERCULOSIS, BACTERIAL ORIGIN OF. It has been suspected, since the discov-



ery of the fungoid origin of various infectious and epidemic diseases, that tubercular disease was also caused by microphytic germs. Investigators in this new branch of etiology studied this disease particularly for a year or two. Its infectious character was established, but its bacterial origin could not be proved by the usual test of inoculation from infusions. Dr. Robert Koch, who had already performed distinguished services in this field, finally succeeded in detecting the specific bacterium. He found a characteristic and previously unknown bacillus in all tubercularly altered organs. They are very slender, and have a length of from one quarter to one half the diameter of the red corpuscles of the blood, rarely as great as the whole diameter. They resemble the *Lepra bacilli*, but are not so thin, nor, like them, tapering at the extremities. Wherever the tubercular process is in its early and active stage, these bacteria are present in great numbers, crowded together in small, dense groups, often forming regular bundles. These groups frequently occupy the interior of the cells. On the outside of the cheesy new-growths great numbers of single bacilli are observed. When the climax of the tubercular eruption is passed, they decrease and may totally disappear.

This characteristic bacillus is found in pulmonary tuberculosis, cheesy bronchitis and pneumonia, tubercles of the brain, intestinal tubercles, scrofulous glands, and fungous inflammation of the joints. It is present in all cases of spontaneous consumption in animals, having been observed in cattle, hogs, poultry, monkeys, porpoises, and rabbits. In monkeys dead of consumption the bacilli were found in countless bunches pervading the lungs, spleen, liver, diaphragm, and lymphatic glands. This bacterium has no motion except the motion of growth. Its life-period is only a few weeks. Koch supposes that the germs attach themselves to the floating particles of the air, and are inhaled with these into the lungs, and that this is the usual manner of infection. They get into the air, as he surmises, from the expectorations of phthisical patients, in which he also found the bacilli. As the dried bacilli were found to retain their fertility for weeks, the dried sputum of consumptives can spread the seeds of disease far and wide through the air.

This discovery must have an important influence on the diagnosis and treatment of consumption. It is the first infectious disease of human beings which has been positively proved to be of parasitic origin. The prophylactic precautions suggested by Koch's discoveries are very promising. Unlike the anthrax bacillus, the specific germ of tuberculosis thrives only in the living body. The sputum of consumptives should be carefully disinfected; and, since the identity of *Perleucht* of domestic animals and the tuberculosis of human beings has been established, the meat and milk

of infected animals ought to be inspected and destroyed.

TURKEY, an empire in Europe and Asia. The fundamental laws are derived from the precepts of the Koran and the *Multeka*. When not in conflict with the sacred Mohammedan laws the will of the Sultan is absolute. The Constitution proclaimed by Abdul-Hamid, December 23, 1876, is modeled upon European forms of government; but, like the previous Constitution of Sultan Abdul-Medjid, it has not been carried into effect.

The reigning Sultan is Abdul-Hamid II, born September 22, 1842, who succeeded to the throne upon the deposition of his brother Murad, August 31, 1876. Murad, who was declared by the Council of Ministers to be an imbecile, had succeeded his uncle, Abdul-Aziz, deposed May 30, 1876, on a similar pretext. Abdul-Aziz died soon after in consequence of an act of violence, which was officially reported to have been committed by his own hand. Abdul-Hamid is the thirty-fifth in descent of the house of Othman. The crown descends to the oldest male member of the imperial family. All children born in the harem of free women or of slaves are legitimate and equal in rank. The inmates of the harem are usually brought from abroad, most of them from Circassia. A certain number, usually seven, are chosen by the Sultan as *Kadyn*, or Ladies of the Palace; the rest, called *Odalik*, serve these in the capacity of servants. The chief of the guard of eunuchs is equal in rank with the Prime Minister, or Grand Vizier.

The executive and legislative authority is exercised under the Sultan by the Grand Vizier, who is the head of the temporal Government, and the *Sheik-ul-Islam*, who is the chief interpreter of the Koran and head of the *Ulema*, or council of learned men summoned to debate and expound the laws.

The Ministerial Council of the Sublime Porte was composed at the end of 1882 of the following persons: Said Pasha, Grand Vizier and Minister of Foreign Affairs; Akif Pasha, President of the Council; Ghazi Osman Pasha, Minister of War; Hassan Pasha, Minister of Marine; Mahmud Nedim Pasha, Minister of the Interior; Djevdet Pasha, Minister of Justice; Munir Bey, Minister of Finance; Subhi Pasha, Minister of Commerce and Agriculture; Mustapha Pasha, Minister of Public Instruction; As-sym Pasha, Director of *Vakufs* (sacred property); Hassan Fehmi Effendi, Minister of Public Works; Ali Saib Pasha, Chief of Artillery.

The *Sheik-ul-Islam* is Ahmed Essad Effendi. The *Kizlar Agassi*, or chief of the eunuchs, is Hafiz Bahram Agha.

The empire is divided into *vilayets*, which are subdivided into *sandjaks*, and these into *kazas*. Over each *vilayet* is placed a *vali*, or governor, who is assisted by a council.

AREA AND POPULATION.—The area of the Turkish Empire in Europe, Asia, and Africa, before the war of 1877-'78, was estimated to

be 1,742,874 square miles. The estimated population was 28,165,000. By the creation of the independent tributary state of Bulgaria, and the autonomous province of Eastern Roumelia, the delivery of Bosnia and Herzegovina to Austrian administration, and the cessions of territory to Roumania, Servia, Montenegro, and Greece, the area of the dominions under the rule of the Sultan in Europe was reduced from 138,264 to 56,868 square miles, and the population from 8,315,000 to 3,982,000. The total area of the dominions immediately subject to the Sultan in 1882 was 3,087,850 square kilometres, or about 1,180,000 square miles, though the authority of the Government is weakened in parts of Asiatic Turkey. The total population of the immediate possessions was estimated at 21,633,000. The total area of the vassal, tributary, and nominally subject states and provinces was 3,148,400 square kilometres, about 1,200,000 square miles; total population, 20,580,400. The area, in square kilometres, and population of the divisions of the Ottoman Empire, including the tributary and nominally dependent states, are given in the following table:

POSSESSIONS.	Area.	Population.
Immediate possessions in Europe	165,498	4,490,000
Eastern Roumelia.....	35,901	85,951
Bosnia and Herzegovina.....	61,065	1,158,440
Sandjak of Novi-Bazar.....	63,972	108,000
Bulgaria, tributary principality....		1,998,988
Total Turkey in Europe.....	326,376	8,681,400
Immediate possessions in Asia...	1,589,055	16,182,900
Samos, tributary principality.....	468	39,108
Total Turkey in Asia.....	1,589,523	16,172,000
Vilayet of Tripoli.....	1,083,850	1,010,000
Egypt, protectorate.....	2,987,000	16,400,000
Total in Africa.....	4,020,850	17,410,000
Total Ottoman Empire.....	6,236,250	42,213,400

The approximate population of the chief cities of Turkey in Europe is as follows: Constantinople, between 600,000 and 700,000; Salonica, between 60,000 and 80,000; Adrianople, from 60,000 to 62,000; Philippopolis, 24,053; Serajevo, 21,377. The approximate population of the chief cities of Turkey in Asia was as follows: Smyrna, 150,000; Damascus, 150,000; Aleppo, 70,000; Beyrut, from 60,000 to 70,000; Brussa, 60,000; Erzerum, 60,000; Kaisarié, 60,000; Bagdad, 40,000; Mosul, 40,000; Manissa, 40,000; Sivas, from 35,000 to 40,000; Marash, 35,000; Trebizond, 32,000; Urfa, 30,000; Van, 30,000; Jerusalem, 28,000; Amassa, 20,000.

Fully one half of the population of Turkey in Europe, about 17½ per cent of the population of Turkey in Asia, and 1 per cent of that of the African possessions, altogether about 23 per cent of the Sultan's subjects, are Christians or Jews of the various Oriental and Occidental rites. The heads of the different Churches, especially the Greek and Armenian Patriarchs,

as well as the High Rabbi of the Jews, are dignitaries possessing much power and influence, being recognized as chiefs of their religious communities by the Ottoman Government. The Patriarch of the Greek Orthodox Church is Joachim III. The Exarch of the Bulgarian branch of this Church is Yossif. The name of the Patriarch of the Orthodox Armenians is Narses; of the Patriarch of the Catholic Armenians, Azarian; of the civil head of the Latin community, O. Varthalites Effendi; of the Protestant community, Agop Effendi. The Chacham Bashi, or Grand Rabbi, of the Hebrews is Moses Levi Effendi. The Latins, or Christians using the Roman liturgy, consist of Greeks, Armenians, Bulgarians, and Croats. The Maronites, the Melchite Greeks, the Latins, and the United Syrians have patriarchs residing at Antioch. The Patriarch of the Chaldeans resides at Mosul.

COMMERCE.—The average value of the import trade is estimated at \$104,000,000; the average total export trade at \$96,000,000. Constantinople receives about \$48,000,000 of the imports and ships about \$34,500,000 of the exports. The leading articles of export are cereals, tobacco, wools, opium, meerschaum, oil of rose, gum, and skins, besides cotton, which began to be cultivated in 1860, fruit, wine, honey, wax, morocco leather, madder, carpets, etc. The commercial intercourse is mainly with Great Britain, Italy, Austria, and Greece.

The principal ports, next to Constantinople, are Smyrna, Chio, and Salonica. The total number of arrivals in all the ports in the year ending March 1, 1879, was 183,730; tonnage, 19,513,559, against 12,810,003 tons in 1877-78. The number of steamers arriving in 1878-79 was 20,174; tonnage, 13,978,439. The movement of shipping in the port of Constantinople in 1880 embraced 12,532 sailing-vessels, of 1,201,546 tons, and 4,787 steamers, of 3,616,636 tons. Of the steam tonnage about 47 per cent was English, 13 Russian, 12 Austrian, 10 French, 5 Turkish, and 2 Greek; of the other tonnage about 41 per cent was Greek, 31 Turkish, 15 Italian, 6 Austrian, and 2 Russian. The merchant marine consisted in 1879 of 220 sailing-vessels, of 34,500 tons, and 11 steamers, of 3,350 tons, engaged in foreign trade. Including coasting-vessels, the total tonnage was 181,500.

The first railroad in Turkey was built in 1865. At the beginning of 1877 there were 965 miles in operation in European Turkey, and 172 miles in Asia Minor.

The length of telegraph lines in 1879 was 17,950 miles; of wires, 31,782 miles. The number of dispatches in 1878 was 1,344,702, of which 523,230 were domestic, 291,453 international, and 530,019 official. The receipts amounted to about \$1,200,000, working expenses \$970,000.

The post-office, previous to 1876, was entirely managed by foreigners. In September



of that year the Government established an international post-office. The number of letters in 1874 was 2,439,000, including postal-cards; of printed inclosures, 75,000; of newspapers, 1,250,000.

**ARMY.**—A plan for the reorganization of the army was confirmed by the Padishah in the latter part of May, 1880. According to this scheme, which is being carried out as rapidly as possible, the army is divided into the Nizam, or active army, the two bans of the Redif, corresponding to the German Landwehr, and the Mustafiz, corresponding to the Landsturm. The total period of military service is twenty years: three years of active service in the regular infantry, and four in the other arms; three and two years respectively in the active army reserve; four years in each ban of the Redif; and six years in the Mustafiz. The empire is divided, as formerly, into seven military districts. Each of these furnishes a corps in the active army, and one in each ban of the Redif, except the seventh, Yemen, which furnishes the active corps only, and that only for service within the boundaries of the province. The militia forces of Crete and of Tripoli are not embraced in the organization. Each of the 18 corps consists of 2 divisions of infantry, 2 brigades of 2 regiments in each division; 2 battalions of riflemen; 1 division of cavalry, consisting of 3 brigades of 2 regiments each; 1 regiment of field artillery; and 1 battalion of pioneers, besides the train, a company of telegraphists, and the commissary and sanitary services. Each infantry and cavalry regiment has its depot. The full war effective of the active army, when completely organized, will be, excluding the depot and local troops, as follows:

NIZAM.	War footing.
Infantry.....	468,000
Cavalry.....	64,800
Artillery.....	57,600
Pioneers.....	10,800
Train.....	9,000
Total.....	610,200

The actual strength of the active army, as far as the organization had proceeded in 1881, was 10,311 officers, 150,106 men, 26,140 horses and beasts of burden, and 650 pieces of artillery. Of the two Redif armies only 40 of the 384 battalions existing in *cadre* were under arms. The total nominal strength of the army, according to the new organization scheme, is 1,208,000 men. The Christian population are not liable to arms, and the inhabitants of the district of Constantinople, on both sides of the Bosphorus, are by prescriptive right exempt from military service. In the last Russian War the extreme efforts of the Government could not bring, according to the official figures, over 490,000 men into the field, or 4·3 per cent of the population subject to military service. Taking into consideration the facts that the Albanians have lost all feeling of fidelity to the Caliph, and are clamoring for autonomy;

that the Arabs of Mesopotamia and Syria are no more to be depended upon, while Yemen needs Turkish garrisons to keep it in subjection; that the Kurds will not serve the Sultan, having furnished for ample pay scarcely 5,000 troopers in the Russian War, and that the Greek islands and Tripoli require troops from without to maintain the Sultan's authority, it is not likely that the Padishah will ever command an army of anything like the proportions set down on paper. To put 400,000 men in the field is probably the extent of his resources.

(For an account of the Turkish navy, see NAVIES OF EUROPE.)

**FINANCES.**—The finances of the Ottoman Government have been in a state of confusion since the issue of the first foreign loans to meet the expenses of the Crimean War. Before 1873 the budget estimates were drawn up to exhibit a surplus or an even balance, although large deficits occurred annually. Since then the budgets have shown deficits, but are no indication of the actual amounts. No accounts of actual receipts and expenditures are published. The expenditures are supposed to have exceeded the receipts of recent years £10,000,000 or more. In 1878-'79 the deficit, owing to the Russian War, rose to £36,000,000. The revenue of that year was not over £14,000,000. Since the war, and the loss of some of the richest provinces, the revenue is not more than £10,000,000 or £12,000,000. The Turkish foreign debt consisted mostly, before the recent conversion, of 5 and 6 per cent bonds. The large loans of 1865 and 1874 were issued at less than 50 per cent of their face value.

In 1876 the payment of interest was stopped entirely. The internal and floating debt was reported in the budget of 1874-'75 to be not over £13,000,000. According to some estimates, it amounted in 1878 to £75,000,000; but in the debt statement made on the occasion of the recent settlement with the foreign creditors it is declared not to exceed £20,000,000. From 1876 to 1881 the Government raised money for its present needs by the issue of a vast quantity of paper currency. At the end of 1878 there were said to be over £90,000,000 of paper money in circulation. Its value declined until eventually it was refused in commercial transactions altogether.

The Turkish Government, by a note dated October 23, 1880, invited the holders of Turkish bonds to choose delegates to consult with the Government regarding the settlement and future payment of the debt. The compromise effected with the representatives of the bondholders was sanctioned by a decree of the Sultan promulgated December 28, 1881. The total amount of the bonds was £190,997,980; of the unpaid interest up to March, 1882, £61,803,905; total debt, £252,801,885. This sum was reduced to £106,437,234. For the service of the debt certain revenues were placed at the disposition of the bondholders from January 13, 1882, until the debt shall be extinguished,

to wit, the products of the monopolies of tobacco and salt, and of certain taxes and tithes. These will be administered by a special commission called the Council of Administration of the Ottoman Public Debt. Of the proceeds of these revenues four fifths will be applied to the payment of interest, and one fifth to the reduction of the capital. To the payment of the capital will be applied also the quotas of the Ottoman debt to be assumed by Servia, Montenegro, Bulgaria, and Greece. The bankers of Galata, who had prior rights to a portion of these revenues as a guarantee for advances amounting to 8,170,000 Turkish pounds, were indemnified by reserving 590,000 Turkish pounds (£1 Turkish = \$4.30) annually out of the mortgaged revenues for the payment of 5 per cent interest on their debt and its gradual extinction. If the yield of the ceded revenues is more than 5 per cent of the reduced debt, the excess will be turned into the Turkish Treasury.

The tobacco monopoly, which is one of the resources ceded to the bondholders, is to be farmed out in the same manner as the Italian *régie*. The loans comprised in the resettlement are the general consolidated debt, the loans of 1858, 1860, 1862, 1863-'64, 1865, 1869, 1872, and 1873, and the Turkish lottery railroad loan. The loans of 1854, 1871, and 1872, are secured by the largest part of the Egyptian tribute.

The loan of 1855, guaranteed by France and England, consumes the balance of the tribute and an annual sum of £197,602 sterling besides. The service of the domestic debts is provided for in the budget of 1880-'81. The European bondholders do not expect to receive from the ceded revenues over 1½ per cent interest per annum on the reduced capital.

The budget for the year ending March 13, 1881, was as follows, in piasters (1 Turkish piaster = 4·3 cents):

RECEIPTS.	
Tax on land products.....	225,000,000
Military exemption tax.....	46,000,000
Tithes.....	500,000,000
Customs.....	180,000,000
Sheep-tax.....	165,000,000
Tobacco.....	100,000,000
Various duties.....	96,998,000
Government land.....	5,200,000
Forests.....	6,070,000
Salines and mines.....	72,309,000
Posts.....	6,800,000
Telegraphs.....	15,700,000
Receipts of Navy.....	36,505,000
Receipts of Ministry of War.....	23,500,000
Receipts of Artillery Department.....	4,009,000
Sanitary duties.....	5,135,000
Egyptian tribute.....	76,500,000
Eastern Roumelian tribute.....	24,000,000
Other tributes.....	13,372,000
Miscellaneous sources.....	8,981,000
Total.....	1,615,584,000

EXPENDITURES.	
Foreign debt service.....	209,647,961
Internal debt service.....	39,812,441
Floating debt service.....	241,863,946
Civil list.....	86,497,324
Senate.....	2,406,019
Chamber of Deputies.....	6,598,981
Council of State.....	1,880,400

Brought forward.....	568,702,072
Audit.....	1,066,640
Prime Minister's Office.....	2,291,364
Magistracy.....	15,081,843
Administration of Interior.....	52,704,132
Prisons.....	5,780,680
Posts and telegraphs.....	24,956,008
Other expenses of Interior.....	619,300
Ministry of Foreign Affairs.....	19,810,232
" Justice.....	32,809,850
" Public Instruction.....	8,100,093
" Public Works.....	10,380,004
" Commerce and Agriculture.....	15,163,720
" Finance.....	133,200,717
" War.....	536,804,944
" Marine.....	81,154,650
Artillery Department.....	86,144,487
Pious foundations.....	33,573,414
Pensions and charities.....	52,552,851

Total ordinary expenditures..... 1,708,925,116

The estimated extraordinary expenditures are 210,951,243 piasters, making the total expenditures 1,914,876,359 piasters, or about \$82,340,000, to 1,615,584,000 piasters or \$69,470,000 of revenue, leaving an estimated deficit of 299,292,359 piasters.

FOREIGN AND DOMESTIC POLITICS.—The Sultan was drawn into a closer friendship with Germany as the only great power which was not ready to devour some portion of his dominions. Upon the formation of the Gambetta Cabinet there were prospects of a military alliance in the event of a war of revenge. When Bismarck saw that there was no reason to apprehend a French war, he endeavored to discourage the hopes of the Sultan of recovering Tunis and re-establishing his authority over the whole of North Africa. As against the designs of Gambetta in Egypt, Germany was prepared to support the position of the Porte; yet, in the development of the Egyptian question, the German advice to the Sultan was to accept the course of England as inevitable—with less effect, however, than was met with in persuading Abdul-Hamid to acquiesce in the encroachments of Austria. Friendship with Austria and England and a suspicious attitude toward France and Russia on the part of Turkey, subserved in different ways the interests of Germany. The eastward advance of Austria promotes the political and commercial expansion of Germany. In the Egyptian question, besides wishing to avert the danger of a European war, the German Chancellor was satisfied to have England seize in advance the "compensation" which Russia would proffer to Great Britain in the final division of the "sick man's" estate, and thus help to hedge the Muscovites out of the Balkan Peninsula. The failure of Germany to support the demands of the Sultan in the Egyptian question caused a diminution in his faith in German amity and reliance on the advice of his new friend.

The Porte sent a circular note to the powers on October 3, 1880, when the combined fleets were preparing for the Dulcigno demonstration, stating what it was ready to do to carry out the unexecuted clauses of the Berlin Treaty. In the same note it offered to arrange a composition with the bondholders. The Sultan's motive in volunteering to provide security to



the foreign creditors was the fear of an International Financial Commission, which would place Turkey in the position of Egypt. He proposed to include in the arrangement the Russian War indemnity and the floating debt. His scheme for getting rid of the bondholders' claims, the floating liabilities, and the war ransom together would not cripple the treasury, since the only actual source of revenue which he offered to cede to the creditors was that of the "six contributions," which was already sequestered and administered by the Galata bankers. The others were patent dues and an increase in the customs duties, revenues which were not in existence, and which could not be raised without the consent of the powers. The delegate of the bondholders, Bourke, refused to include the Russian indemnity, and insisted that all the proposed revenues and something additional must be reserved to secure the compromised foreign debt. The negotiations with the bondholders' delegates were pushed to a conclusion, and the danger of an international commission and European tutelage removed. The question of the Russian War indemnity, which was before an element of danger, now became an indifferent matter. The Russian Government made great efforts to obtain a settlement in the way suggested by the Porte. The first precedent of the transfer of specific revenues and their control to creditors was the arrangement with the Galata bankers in 1879, to which the Sultan was driven in his financial straits. By the extension of like privileges to the bondholders political dangers were averted without financially embarrassing the Government. An arrangement on similar lines with the Russian Government would involve political danger and pecuniary sacrifices at the same time. The Turkish Prime Minister suspected that Russia desired to obtain the financial administration of some province in Asia Minor as a preliminary step toward annexation. After many months of tiresome negotiations, during which the projects which the Sultan agreed to in his palace he rejected through the Porte, and the propositions of the Porte were shelved at the palace, a convention was finally concluded in May, 1882. Instead of the forty millions of war indemnity, the Russian Government agreed to accept an annuity of 350,000 Turkish pounds, secured on the sheep-tax of the Vilayet of Aleppo and the tithes of the Vilayets of Konieh, Adana, and a part of the Vilayet of Sivas. These revenues are to be collected by the Ottoman Bank, under the supervision of an agent of the Russian Government, who is not officially recognized by the Porte. This peculiar Byzantine arrangement will enable the Ottoman Government to evade its engagements, if so disposed.

The Prime Minister, Said Pasha, endeavored to obtain the Sultan's consent to a programme of reform which would rescue the administration from the degeneration resulting from the interference of the corrupt retainers of the pal-

ace, restore the Porte to its functions as the exponent of the internal and foreign policy, and regain the respect of Europe by a consistent external policy and progressive internal improvements, including the Armenian reforms provided for in the Treaty of Berlin. Said's protest against the Sultan's irregular methods, in which he had before pliantly acquiesced, was provoked by the action of the Sultan in the Russian indemnity negotiations in concluding arrangements with the Russian Minister through a palace official without the participation of the Porte in any way. Said was subsequently called into consultation, when he vexed the Sultan by protracting the negotiations.

At the beginning of May, Said Pasha was summarily dismissed from the premiership. The autocratically inclined Abdul-Hamid felt thwarted and restricted by the independence of judgment and decision of character of the First Minister. He easily persuaded himself, when Said's firmness in defending the interests of Turkey brought him into collision with the cabinets of Europe, that his vigorous but supple Minister was lacking in the right qualities, and that he could guide the foreign policy more ably himself. The succeeding First Minister, Abdurrahman Pasha, was known as an efficient and honest provincial governor in Asia, but without experience in European diplomacy. During his brief tenure of office, the intercourse was entirely between the embassies and the palace, through the roundabout channels to which Said Pasha had skillfully accommodated himself without allowing his functions to be superseded. After a few weeks, Abdurrahman asked to be relieved. The statesman to whom the Sultan now turned insisted upon the cessation of palace interference. He was finally constrained to recall Said Pasha, who was reappointed Vizier in the second week of July. The Egyptian crisis occurred during Abdurrahman's brief ministry. The Minister advised the Sultan to co-operate with Europe, and seek to have the intervention in Egypt intrusted to Turkey. Abdul-Hamid, set in his Islamic policy, and listening only to the palace party, lost every opportunity of taking part in the settlement of the Egyptian difficulties, and only tried to repair his blunders when it was too late. (See EGYPT, for account of the Constantinople Conference, and Turkey's action in the Egyptian affair.)

The Armenian question was pressed upon the consideration of the Porte before the Egyptian crisis, but was then allowed to drop. Russia assumes the rôle in Armenia which she played in Bulgaria; but the Sultan is not afraid of the Armenians accepting the Russian championship when the choice lies between Turkish rule and Russian. One of the antiquarian national movements has been set on foot in Armenia, looking to the re-establishment of the ancient Armenian monarchy; but it is even more artificial than the similar movements

which took place in European Turkey. Russia has massed in Russian Armenia an army which is said to number seventy thousand troops, exclusive of the necessary garrisons. This suspicious movement was met by strengthening the Turkish force in that region, and extending the fortifications at Erzerum, so as to make it a fortress of the first class.

The hopes of the Sultan of soon reorganizing his empire on the basis of Islamic ideas seemed to decline as the year advanced. In May a circular to the powers demanded that the consular courts should be abolished, and the rights of foreigners in civil and criminal cases confided to the jurisdiction of the national tribunals—a demand which was subsequently not pressed. The Sultan called to his aid German experts to help arrange the ways and means and the technical details of reforms in the military organization, finances, and civil administration of the empire, which would develop the Mohammedan character of the Ottoman state, and at the same time satisfy Europe and preclude future interference. Three important commissions were appointed to investigate questions of administrative reform, which entered upon their labors in the autumn. The first, consisting of the Finance Minister, Munir Pasha, and the two Germans, Wettendorf Pasha and Bertram Effendi, was to elaborate a scheme for the organization of a new system of finance. Another of the commissions, composed of the Sheik-ul-Islam and the Minister of Justice, Djeydet Pasha, occupies itself with legal reforms, including a scheme of abolishing the extra-territorial jurisdiction of the powers in criminal cases. One of the results of the Islamic policy pursued by Abdul-Hamid has been the withdrawal of European capital from the country, the outflow of specie, a decline in the value of real estate, and a period of commercial stagnation, enforced idleness, and popular misery. European speculators continued to clamor for railroad concessions, for the delivery of the undeveloped mines of the country into their hands, and for other privileges; but the Sultan refuses to grant any commercial concessions or opportunities, particularly in Anatolia.

At the end of November a conspiracy to kill or depose Abdul-Hamid was reported to him. In the panic which ensued, the ministry was dismissed, and for several days every one was held in suspicion. Achmet Vefyk, a former Grand Vizier, whom Said Pasha had a few weeks before dismissed from the governorship of Broussa for disobedience, was appointed to succeed him as First Minister. Two days afterward Said was again recalled and the former ministers reappointed, including Mahmud Nedim, the Minister of the Interior, Said's determined enemy, through whose intrigues, in a great measure, his dismissal had both times been brought about.

The Mohammedan religious ferment of the last few years, which Abdul-Hamid has en-

couraged in order to divert to his own support as the spiritual head of Islam and strengthen his waning power, turned out to be a source of weakness instead. Owing to his inability to prevent the French from annexing Tunis or the English from conquering Egypt, the Arab races in Asia and Africa manifested a disposition to reject the authority of the Ottoman Caliph. A dangerous agitation broke out in Arabia during the Egyptian War. The Grand Shereef of Mecca, Abdul-Moutahib, encouraged by Arabi Pasha, conceived the idea of heading a rebellion against the Sultan and proclaiming himself Caliph. Great excitement prevailed among the Hedjaz and Bedouin tribes; but before there was any open insurrection the aged Shereef was deposed by order of the Sultan and placed in confinement. Abdullah Doun Pasha was commissioned to officiate pending the appointment of a new Shereef. His brother, Aoun Refik, was selected by the Caliph in September. When he arrived, his brother tried to make use of the popular disaffection to maintain himself in the position. Aoun Refik is a younger brother of Shereef Hussein, who was assassinated in 1879 at Jeddah. The new Grand Shereef is esteemed a refined and enlightened man, entirely free from bigotry.

While the Arabs of Yemen and the Hedjaz manifested a spirit of rebellion which has not been seen since the opening of the Suez Canal enabled the Turkish Government to send ironclads to the Red Sea, the Tripolitans exhibited similar signs of discontent and sedition. The African Mussulmans, more fanatical than their fellow-believers in Arabia, are attracted to the pretended Mahdi, Muhamed-es-Senoussi, who from the heart of the Libyan Desert exerts a secret and formidable power throughout North Africa, and causes much anxiety to the French in Tunis and Algiers. The fact that on November 12, 1882, commences the year of prophecy in which a Moslem Messiah is to appear, is one cause of the unusual excitement throughout the Ottoman Empire. Arabi Pasha was deemed by some to be the destined deliverer. The chief Senoussi, who pretends to exhibit all the signs of the prophecy, being in the fortieth year of his age, the son of a Muhamed and a Fatima, with arms of extraordinary length, etc., is abler than the rival Mahdi who defies the military power of the Egyptian Government in the Soodan (see *EGYPT*).

The Kurdish Sheik Obaidullah, whose forays in Northwest Persia, in 1880, threatened to provoke hostilities between the Sultan and the Shah, and who on one of his marauding expeditions threatened the important city of Tabreez, came to Constantinople and surrendered himself upon the summons of the Sultan in the latter part of 1881. His followers ceased their depredations while their chieftain was kept as a hostage at Constantinople. At the end of the summer of 1882 he was allowed to escape, and went back to the abode of his tribe in the region of Lake Van. He afterward consented



to live in retirement at Mosul; but while being conducted thither he was rescued from his escort by the Kurds, headed by his son, and

carried off to a stronghold in the mountains, called Huronina. A Turkish force was sent to recapture him in October.

## U

**UNITARIANS.** The annual meeting of the *American Unitarian Association* was held in Boston, Mass., May 30th. The Hon. Charles Allen presided. The receipts of the treasury for the year had been \$35,000. The number of societies contributing to the funds of the Association had increased from 148, in the preceding year, to 193, and was now larger than at any time during the fifty-seven years of the history of the body. The work of the society had included the continued assistance of feeble societies in New England; the maintenance and enlargement of efforts in college towns; enlargement of the number of missionaries in new States and Territories; free distribution of tracts and books; aid to societies in New Orleans, La., Evansville, Ind., and Philadelphia, Pa.; and the establishment of a mission to the Scandinavians in the Northwest. The Association resolved to ask the churches for \$50,000 for the coming year.

The *Women's Auxiliary Conference* had received during the year \$2,866, and had supported a missionary in Dakota, and aided some poor societies. A considerable amount of work of a similar character had been performed by branch associations.

The *National Conference of Unitarian and other Christian Churches in the United States* met at Saratoga Springs, N. Y., September 29th. Governor Long, of Massachusetts, presided. About 600 delegates were present, and the total attendance upon the meetings was 2,200. The report of the General Council gave a summary of the work which had been accomplished by the Conference since 1866, and added in respect to the work of its own term of two years (the two years since the last meeting of the Conference), that \$18,000 had been raised to build a church at Ann Arbor, Mich.; the effort to raise \$50,000 for the Theological Seminary at Meadville, Pa., had failed; and only about two thirds of the \$50,000 which the previous Conference had decided were needed yearly for missionary work had been raised. A large increase had, however, taken place in the contributions during the year. The Rev. A. D. Mayo had spent two years in the South, under the auspices of the Conference, in the interests of public education. The Western Conference reported on the building of churches, and the advance of its efforts in Colorado and New Mexico. Its financial affairs were prosperous, and its societies were enjoying a healthy increase. The Middle and Southern Conference had no missionaries at work, but most of its societies were in good condition. The New England churches had furnished during the past two

years more than \$800,000 for church and benevolent work. A report was presented from the American Unitarian Association, and the subject of a union between that body and the National Conference was considered. An amendment to the constitution of the Conference was adopted, explaining that "while we believe that the preamble and articles of our constitution fairly represent the opinions of a majority of the churches, yet we wish distinctly to put on record our declaration that they are no authoritative test of Unitarianism, and are not intended to exclude from our fellowship any who, while differing from us in belief, are in general sympathy with our practical purposes and aims." A resolution in favor of total abstinence was adopted. The Conference was informed that Mr. Wade had pledged himself that when the committee of the Conference on the endowment of the institution to be called after him, the Wade Theological School, at Cleveland, Ohio, had secured \$150,000 toward that object, he would add \$350,000; and that if the committee would raise \$50,000 more, he would add a like sum, so as to make the whole endowment \$600,000. The Conference resolved that an endeavor should be made to raise \$50,000 annually, during the next two years, for the American Unitarian Association.

After the adjournment of the Conference, an address was issued by its Council, setting forth the work of the body, and the character of the enterprises for which it asked contributions. The address stated that of the \$800,000 raised for church-work by the New England churches, more than \$250,000 were spent on enterprises outside of the churches themselves; invited co-operation in the endowment of the Wade Theological Seminary; mentioned that \$30,000 had been raised toward the amount of \$50,000 sought for the endowment fund of the Meadville Theological School; commended an enterprise for raising \$10,000 for a church in the university town of Madison, Wis.; apportioned among the several conferences the amount they were expected to contribute toward providing \$50,000 for the work of the American Unitarian Association; and asked for \$1,500 in support of Mr. Mayo's educational mission in the South.

The *National Unitarian Conference* in England was held in Liverpool, in May. Mr. James Heywood, F. R. S., presided. Free exchanges of views were made in the essays which were read on various topics of interest to the Unitarian churches.

The fifty-seventh anniversary of the *British and Foreign Unitarian Association* was

held in London during the first week in June. Mr. David Ainsworth, M. P., presided. Questions were discussed respecting the means of attracting the people to public worship, and concerning the interests of Sunday-schools, and moral and religious education.

**UNITED BRETHREN CHURCH.** The "United Brethren Year-Book" for 1883 gives statistics of this Church, of which the following is a summary: Number of conferences (including one in Sherbro, Africa), 51; number of churches, 4,463; of members, 159,547; of itinerant preachers, 1,257; of local preachers, 963; number of meeting-houses, 2,322, the probable value of which is \$2,974,313; number of parsonages, 389, the probable value of which is \$282,284; number of Sunday-schools, 3,180, with 25,690 officers and teachers and 165,743 scholars. Amount of contributions: For salaries of ministers, \$387,710; for ministerial aid, \$3,136; for missions, \$45,293; for woman's missions, \$4,948; for church-erection, \$1,742; for support of bishops, \$6,661; for colleges and seminary, \$36,450; for ministerial education, \$1,477. Total amount of contributions for all purposes, including church expenses, \$811,209. Number of bishops, five.

One general religious paper, six Sunday-school and missionary journals, and a woman's missionary paper, in the English language, and one general religious paper and one Sunday-school journal in the German language, are issued from the publishing house in Dayton, Ohio.

The educational institutions comprise twelve colleges and seminaries and the Union Biblical Seminary at Dayton, Ohio.

The twenty-ninth annual session of the *Home, Frontier, and Foreign Missionary Society* of the United Brethren in Christ was held in Lebanon, Pa., beginning May 26th. The receipts of the treasury of the society had been \$49,674, while its net liabilities amounted to \$26,154. The amount of the permanent fund was reported to be \$52,998. The receipts and expenditures for church extension had been \$2,327 each. The society had in its home department 214 missionaries in 31 self-sustaining conferences, with 15,532 members, 3,563 of whom had been added during the year. The amount expended by branch treasuries in the department of work had been \$21,165.

In the foreign department, nine missionaries were employed in Germany, and reported considerable success. The Sherbro Mission, in West Africa, reported six American missionaries, ten native assistants, a number of itinerating students and mechanics, and five stations occupied and two about to be opened at Shengay, with two stations at Bempeh; while the work of the mission was or would be extended to about one hundred towns.

The *Woman's Missionary Association* had received \$5,909. It was interested in work in the African and German missions, and was contemplating the opening of a Chinese work on the Pacific coast of the United States.

**UNITED STATES.** The year was characterized by few events of national importance in the United States. The change of administration which occurred in the fall of 1881 showed its effects in the most gradual manner, the President being cautious in making official changes, as well as in all matters pertaining to public policy. At the beginning of the year three members of the Garfield Cabinet remained, viz.: Robert T. Lincoln, of Illinois, Secretary of War; William H. Hunt, of Louisiana, Secretary of the Navy; and Samuel J. Kirkwood, of Iowa, Secretary of the Interior. In April Mr. Hunt and Mr. Kirkwood retired, the former receiving the appointment of Minister to Russia. William E. Chandler, of New Hampshire, was appointed Secretary of the Navy, and H. M. Teller, of Colorado, Secretary of the Interior. The appointment of Mr. Chandler excited some opposition in the Senate, on political grounds, but he was confirmed on the 12th of April, by a vote of 28 to 16, several Democratic Senators not voting. Mr. Teller's appointment was not opposed. In March an appointment of Associate Justice on the bench of the Supreme Court was made, in consequence of the retirement of Mr. Justice Hunt, for whom special provision had been made, by Congress continuing his salary, although he had not served ten years. The first name sent in for the vacant judgeship was that of Roscoe Conkling, of New York, which was received on the



FREDERICK T. FRELINGHUYSEN, SECRETARY OF STATE.

[Born in Milltown, New Jersey, August 4, 1817; graduated at Rutgers College in 1836; admitted to the bar in 1839; Attorney-General of New Jersey in 1861 and 1866; United States Senator from December 3, 1866, to March 3, 1869, and from March 4, 1871, to March 3, 1877. His appointment to the highest position in President Arthur's Cabinet was confirmed by the Senate December 12, 1881.]

24th of February. For some days it was left uncertain whether Mr. Conkling would accept the place, but on the 3d of March, after the



appointment had been confirmed, he wrote a letter to the President declining. In this he said: "It will ever be a matter of pride and satisfaction that you and the Senate deemed me fit for so grave and exalted a trust. But, for reasons which you would not fail to appreciate, I am constrained to decline." The place was then offered to Senator George F. Edmunds, of Vermont, who also declined. The appointment was then tendered to Judge Samuel Blatchford, of the Circuit Court, and by him accepted. He was promptly and unanimously confirmed, and the Supreme Bench, for the first time in several years, was fully occupied. The name of Aaron A. Sargent, of California, was submitted to the Senate in the latter part of February, for the position of Minister to Germany, and the appointment was confirmed in March. An appointment which attracted some attention and produced considerable opposition was that of Roland Worthington to be Collector of the Port of Boston. He was identified with what was known as the "Stalwart" wing of the Republican party, and was opposed by both the Senators and several of the Representatives from Massachusetts. The appointment was sent in early in April, and, after considerable opposition in the Senate, was confirmed on the 15th of May, by a vote 38 to 14. Near the beginning of August General U. S. Grant and Mr. William H. Trescott were appointed commissioners to negotiate a commercial treaty with Mexico. Among the other important appointments of the year were those of Alphonso Taft, of Ohio, to be Minister to Austria; John Russell Young, of New York, Minister to China; William W. Astor, of New York, Minister to Italy; James R. Partridge, of Indiana, Minister to Peru; Nicholas Fish, of New York, Minister to Belgium; William L. Dayton, of New Jersey, Minister to the Netherlands; Eugene Schuyler, of New York, Minister-Resident and Consul-General in Greece, Servia, and Roumania; John M. Francis, of New York, Minister to Portugal; M. J. Cramer, of Kentucky, Minister to Switzerland; C. C. Andrews, of Minnesota, Consul-General at Rio Janeiro; and Adam Badeau, of New York, Consul-General at Havana.

The first session of the Forty-seventh Congress continued until the 8th of August. The main features of legislation were contained in the bill granting a pension of \$5,000 a year to the widow of President Garfield, approved February 16th; the Anti-Polygamy Bill, March 22d; the Apportionment Bill, increasing the number of Congressional Representatives to 325; the Anti-Chinese bill, restricting Chinese immigration for twenty years, vetoed April 4th, and the modified bill limiting the restriction to ten years, approved May 6th; the Tariff Commission Bill, approved May 15th; the bill extending the charters of national banks, approved July 12th; and that providing for distribution of the remainder of the Geneva award, approved June 5th. The appropria-

tions exceeded \$251,000,000. The bill appropriating nearly \$19,000,000 for the improvement of rivers and harbors was vetoed on the 1st of August, and passed, notwithstanding the President's objections, on the following day. (For particulars of congressional action, see CONGRESS; for action under the Tariff Commission Bill, see TARIFF REVISION.)

The political movements of the year were confined to the several States, but received a national significance from the fact that members of Congress were to be chosen, and in a number of States Legislatures were to be elected which would have occasion to choose United States Senators. In the more prominent Northern States causes of dissatisfaction appeared to be at work which especially affected the Republican party. The change of the national Administration in the fall of 1881 had produced an attitude of sensitiveness and suspicion on the part of the wing of that party which had sympathized with General Garfield



CHARLES J. FOLGER, SECRETARY OF THE TREASURY.

[Born in Nantucket, Massachusetts, April 16, 1818; graduated at Hobart College, Geneva, New York, in 1836; admitted to the bar in 1839; elected Judge of Ontario County Court in 1851; elected State Senator in 1861, '63, '65, '67, and '69; appointed by President Grant Assistant United States Treasurer in New York, in 1869; elected Associate Judge of the Court of Appeals in 1870, and Chief Judge in 1880; was appointed a member of President Arthur's Cabinet October 27, 1881.]

in his contest with certain leaders with whom the new President was supposed to be closely allied. Some of the appointments occasioned criticism, and there was apparent a lack of cordiality between the Administration and a certain portion of the Republican party. Moreover, the course of Congress in failing to meet and directly deal with the questions of reform in the civil service and revision of the tariff, together with its persistency in appropriations deemed extravagant, aggravated the feeling of

dissatisfaction. Added to these were a variety of local causes of disaffection. In Pennsylvania the Republicans were divided by an Independent revolt, the cause of which was to be found in the methods of party management under the lead of Senator Cameron. The result was the defeat of the Republican candidates for State offices in November—Pattison, the Democratic candidate for Governor, receiving 355,791 to 315,589 for Beaver, Republican, and 43,743 for Stewart, Independent. (See PENNSYLVANIA.) In New York, while there was no Independent movement, the revolt in the Republican ranks proved to be much greater than in Pennsylvania, and resulted in the



ROBERT T. LINCOLN, SECRETARY OF WAR.

[Born in Springfield, Illinois, August 1, 1843; graduated at Phillips Academy, Exeter, New Hampshire, in 1860, and at Harvard College in 1864; was commissioned Captain and Assistant Adjutant-General of Volunteers, February 11, 1865, and served on General Grant's staff till June 10, 1865; admitted to the bar in 1867. Appointed a member of President Garfield's Cabinet, March 5, 1881, he retains the same position under the present Administration.]

unprecedented majority of more than 190,000 for the Democratic candidate for Governor, who was elected to succeed a Republican. (See NEW YORK.) Still earlier, in October, the Democrats had won a notable victory in Ohio, where, in addition to more general causes of dissatisfaction, the Republicans were divided on the question of regulating the liquor-traffic. (See OHIO.)

Elections were held during the year as follow: Alabama elected State officers and Legislature August 7th, and Congressmen November 7th. Arkansas elected State officers and Legislature September 4th, and Congressmen November 7th. California, Colorado, Connecticut, and Delaware elected Governor, Legislature, and Congressmen November 7th. Florida elected only Legislature and Congressmen, on the same date. Georgia elected State officers and Legislature October 4th, and Congressmen November 7th. Illinois elected Treasurer, Su-

perintendent of Instruction, Legislature, and Congressmen November 7th. Indiana elected minor State officers, Supreme Judges, Legislature, and Congressmen November 7th. Iowa adopted a prohibitory amendment of her Constitution June 27th, and elected minor State officers and Congressmen November 7th. Kansas elected State officers, Legislature, and Congressmen November 7th. Kentucky elected Democratic Clerk of the State Court of Appeals August 7th, and Congressmen November 7th. Louisiana elected Congressmen only, November 7th. Maine elected Republican Governor, Legislature, and Congressmen September 11th. Maryland elected State Judges and Congressmen November 7th. Massachusetts and Michigan elected State officers, Legislature, and Congressmen November 7th. Minnesota elected Legislature and Congressmen November 7th. Mississippi elected Congressmen only. Missouri elected minor State officers, Legislature, and Congressmen, and voted upon an amendment concerning the State judiciary, November 7th. Nebraska elected State officers, Legislature, and Congressmen, and voted upon a woman's suffrage amendment, November 7th. Nevada elected State officers, Legislature, and Congressman November 7th. New Hampshire elected Governor, Railroad Commissioners, Legislature, and Congressmen November 7th. New Jersey elected Legislature and Congressmen November 7th. New York elected Governor, Lieutenant-Governor, Chief Judge of the Court of Appeals, Assembly, and Congressmen, and voted upon amendments making the canals free, and providing for the election of additional Supreme Justices, November 7th. North Carolina elected Associate Judge of the State Supreme Court, six Superior Court Judges, Legislature, and Congressmen November 7th. Ohio elected minor State officers and Congressmen October 10th. Oregon elected State officers, Legislature, and Congressman June 5th. Pennsylvania elected State officers, Legislature, and Congressmen November 7th. Rhode Island elected State officers and Legislature April 5th, and Congressmen November 7th. South Carolina elected State officers, Legislature, and Congressmen November 7th. Tennessee rejected a proposition to hold a Constitutional Convention August 3d, and elected Governor, Legislature, and Congressmen November 7th. Texas elected State officers, Legislature, and Congressmen November 7th; and Vermont the same on September 5th. Virginia elected Congressmen only, November 7th. West Virginia elected Judges of the Supreme Court of Appeals to fill a vacancy, Legislature, and Congressmen October 10th. Wisconsin elected Legislature and Congressmen November 7th, and voted upon amendments relating to residence and registration of voters and the election of county officers, and providing that general elections of State and county officers, except judicial, shall be held biennially in the even years after 1884, those who were chosen in 1881 to hold over



until 1885 if the amendment was adopted. (For particulars of the State canvasses and the result of elections, see the several States.)

The general result of the elections for Congressmen was to give the Democrats a large majority in the House of Representatives of the Forty-eighth Congress. The result of the senatorial elections of the winter following gave the Republicans just one half of the members of the Senate, reckoning the Virginia Readjusters with the Opposition. The subject of political assessments figured among the influences which affected the course of events. (See POLITICAL ASSESSMENTS.) Among other incidents of public affairs was the organization of the Utah Commission and the trial of the Star-Route case. (See STAR-ROUTE TRIAL.)



WILLIAM E. CHANDLER, SECRETARY OF THE NAVY.

[Born in Concord, New Hampshire, December 28, 1835; graduated from Harvard Law School in 1855; served three terms in the New Hampshire Legislature, as Speaker in 1868 and 1874; appointed by President Lincoln Judge-Advocate-General of the Navy Department, March 9, 1865; held the office of First Assistant Secretary of the Treasury, with Hugh McCulloch, for two years. Selected by President Arthur as a member of his Cabinet, his appointment was confirmed by the Senate April 12, 1882.]

The case of Guiteau, the assassin, was carried to the full bench of the Supreme Court of the District of Columbia on questions raised by the defense. The decision was rendered on the 22d of May. Regarding the question of jurisdiction, it was held that the crime consisted in the blow which caused death, and where that blow was struck the crime was committed. On that ground the jurisdiction of the criminal court was sustained. The other exceptions were overruled, the motion for a new trial was denied, and the judgment of the court below was confirmed. Application was made for a re-argument before the court, on the ground that there were new considerations to be urged, but to this application the Court replied on the 5th of June: "In the case of Gui-

teau, the judges who listened to the argument in that case have come to the conclusion that they have exhausted their powers upon it. They have heard it patiently, fully, and fairly, and re-argument would bring them to no other conclusion than that which they have already arrived at; and they decline to reopen the case for argument." Application was subsequently made to Mr. Justice Bradley, of the Supreme Court of the United States, for a writ of *habeas corpus*. This was denied on the 19th of June. The counsel for the doomed man next resorted to the President, in the hope of obtaining a reprieve, and the appointment of a lunacy commission to determine the question of the prisoner's insanity. This effort was backed by a number of philanthropists and scientific experts, but it failed. The question was referred to the Attorney-General, who advised against the reprieve, and expressed doubt of the President's power to appoint such a commission as was asked for. In concluding his opinion, the Attorney-General said:

At the last hour, you are asked to reprieve this justly condemned man, to investigate, in an unusual, if not irregular, way, a fact that has been solemnly determined by the constituted authorities of the law. I submit it ought not to be done. It will establish a dangerous precedent. It will shake public confidence in the certainty and justice of the courts, by substituting your will for the judgment of the law, and its forums, at the instigation of a few who assert he was and is insane, and who press their applications, contrary to the preponderance of medical talent of this country, who believe the other way, and think him sane, as is admitted by one of the most conspicuous, earnest, and important of the petitioners.

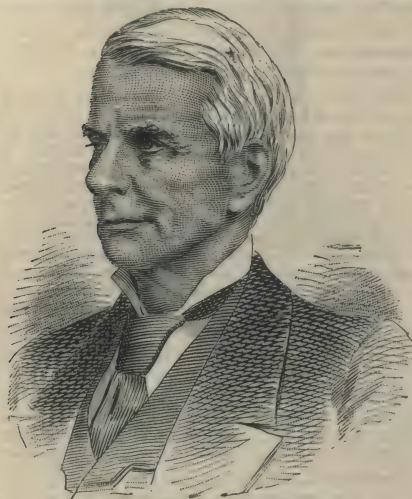
Guiteau was executed on the 30th of June at the jail in Washington. An autopsy was made under the direction of Dr. D. S. Lamb, of the Medical Museum, in the presence of a number of physicians, and the result was reported in an official manner. Of this it was said that some deviations were shown from the typical brain, but "they have absolutely no significance from the point of view of mental derangement." The skeleton was added to the curiosities of the Medical Museum.

The question of compensation to President Garfield's medical attendants was made a matter of controversy in Congress, and was finally referred to a Board of Audit which made the following allowances: Dr. Bliss \$6,500, Drs. Agnew and Hamilton \$5,000 each, Reyburn and Boynton \$4,000 each, and Mrs. Edson \$3,000. The board also allowed different parties \$5,929 for services and supplies, including the receiver of the Central Railroad of New Jersey, \$1,500; C. Jones, Elberon, \$1,162. The allowance for outside claims was about \$11,000 less than the amount available, making the total balance nearly \$19,000 out of the entire appropriation of \$57,000. There were allowances amounting to \$5,440 for extra services by Government employes, the highest sum being \$300 to William Crump. The other allowances vary from \$15 to \$200. The allowances for physicians aggregated \$8,000 less

than the amount specially appropriated for medical attendance.

Captain H. W. Howgate, of the Signal-Service Bureau at Washington, was arrested, near the beginning of the year, on a charge of embezzling funds of the United States in his keeping as disbursing officer of the Bureau. After being in jail for two months in consequence of his inability to procure bail, he was allowed to visit his family in charge of a bailiff by special leave of Judge Wylie. While at his house he managed to elude the bailiff and made his escape. This occurred on the 13th of April, and all effort to rearrest the accused officer, or to discover his whereabouts, was unavailing during the year.

The foreign relations of the Government of the United States have been entirely undisturbed. The special mission of Mr. William



TIMOTHY O. HOWE, POSTMASTER-GENERAL.

[Born in Livermore, Maine, February 24, 1816; admitted to the bar in 1839; member of the Legislature of Maine in 1842; Judge of the Fourth Judicial Circuit of Wisconsin from 1850 to 1855; was elected three times to the United States Senate, and served from 1861 to 1879; was appointed by President Garfield a commissioner to the International Monetary Conference at Paris in 1881. His nomination as a member of his Cabinet by President Arthur was confirmed by the Senate January 5, 1882.]

H. Trescott to Peru, mentioned in the "Annual Cyclopædia" for 1881 (see PERU, CHILI, AND THE UNITED STATES in that volume), led to no practical result. Early in February Mr. Trescott was instructed by the Secretary of State that the United States only proposed to give counsel and aid to Chili in any negotiations which that country might desire to make; that Chili must herself determine whether or not she would accept such aid, but that in no event would the United States take part in negotiations based upon the surrender of Tarapacá and a further indemnity of \$20,000,000, as such a demand was considered exorbitant. Shortly after, on the 22d of February,

Mr. Frelinghuysen instructed Mr. Trescott that the United States would assent to a liberal war indemnity, but that consent was not to be given to the cession of Tarapacá without first communicating with the department; that should Chili persist in her demand for such cession, the creditors of Peru might possibly maintain that the revenue of Tarapacá had been already hypothecated, and that the President desired to urge moderation on the part of Chili.

Under date of February 24th Mr. Trescott sent a dispatch in which he said:

You may assure the President that I have urged upon the Government of Chili the wisdom of moderation in the terms which it demanded. But Chili is determined to have Arica and Tacna, as well as the territory south of the Quebrada de Camarones [Tarapacá]. The indemnity of twenty millions, with this region of country as a pledge, was only an indirect mode of securing the country itself. Peru has not, that I can see, any capacity of resistance in herself, and Chili will not yield to any merely friendly persuasion. The communication to the Government of Chili of the resolution of the Government of the United States, that it will not take part in any negotiation based upon the considerations proposed, and the reply of the Government of Chili, that it is not prepared to modify these conditions, practically close the mission.

On the 4th of March Mr. Trescott telegraphed that the publication of his instructions and confidential communications had rendered a modification of the terms offered by Chili impossible, and he thought his presence in Washington with information would be more useful than remaining at Santiago, where he then was. On the same date he communicated details of his conferences with Balmaceda, the Chilean Minister of State, and the protocol to which they had agreed on the 11th of February. The protocol which was agreed to by Messrs. Trescott and Balmaceda in their conferences at Santiago contained the following:

Chili declares that, as a work of mutual friendship and confidence, she would accept, if they should be offered, the good offices of the United States, in the contest with Peru, provided that the United States, in the exercise of its good offices, accepts the conditions of peace which Chili would be disposed to concede to the enemy, and with the understanding that, if the United States should not obtain the consent of Peru to the conditions of peace, which serve as the basis of its good offices, in that case the action of the United States between the belligerents should terminate.

The terms on which, according to the protocol, Chili would make peace, are as follow:

1. Cession to Chili of all the territory of Peru situated to the south of the Quebrada de Camarones.
2. Occupation of the region of Tacna and Arica for ten years, Peru being obliged to pay 20,000,000 pesos at the expiration of that time. If, at the expiration of that time, Peru should not pay to Chili the 20,000,000 pesos, the region of Tacna and Arica should remain *pro facto* ceded to and incorporated in the territories of the Republic of Chili. If Arica returns to the power of Peru, it shall remain forever unfortified.
3. Chili shall occupy the Islands of Lobos so long as there shall be guano upon them, and both the net product of the guano taken from them and that from the mines discovered and being worked in Tarapacá shall be equally divided between Chili and the creditors of Peru.

On his return to Washington Mr. Trescott



made a final report of the result of his mission, dated June 5th, in which he said :

It only remains for me to state what consideration has so far been given to the proposed conditions. For reasons stated in former dispatches I was obliged to leave Lima before my communication in its formal shape could reach the Chilean Government at Santiago. But that Government has in Lima a diplomatic representative in the person of Señor Novoa, who is authorized to consider any propositions tending to a negotiation for peace. The whole subject was fully discussed with him and General Lynch, the military commander of the Chilean army of occupation, and the propositions, together with the substance of the conference, were telegraphed by Señor Novoa to his Government. I do not regard the telegraphic reply which was communicated by Señor Novoa as conclusive. My dispatch had not yet reached the Chilean Government, and I think it clear that the bare statement of the propositions had not put the Chilean Government in full possession of the considerations which recommended their adoption. I have other reasons for believing that the question is still an open one. The reply of the Government of Chili as communicated by Señor Novoa intimated : 1. That as no active military operations were being conducted by the Chilean army, there was no apparent necessity for a truce. But it is obvious that, as Arequipa is open at any moment to occupation by the Chilean troops from Mollendo, the Peruvian Congress would naturally and properly require some guarantee that its deliberations should be free and uninterrupted. A repetition of the dissolution of Congress because its deliberations were not agreeable to the Chilean Government is a contingency which the Congress, in view of the past, could scarcely disregard, and which would make any effort at negotiation only another unfortunate failure. Besides which, if there are to be no active military operations, there can be no possible danger or inconvenience to Chili in giving such a condition of things the sanction of a formal agreement by a short truce. 2. While the Chilean Government desired peace, it was unwilling to enter upon negotiation without distinct agreement in advance of the terms which must be accepted. It was dissatisfied with the experience of its former attempts at negotiation with the Calderon Government, and was indisposed to renew the effort without the certainty of a successful result. It was willing, therefore, to negotiate informally with General Montero, and, upon the signature of satisfactory preliminaries, would recognize the existence of the Peruvian Government *pari passu* with the execution of the treaty. But the Congress which had authorized General Montero to negotiate had expressly forbidden any cession of territory, and it was therefore simply impossible for General Montero to sign a treaty containing such provisions. After some discussion Señor Novoa expressed his willingness to accept a preliminary agreement by which General Montero would bind himself to submit for approval to the national Congress such a treaty as he and Señor Novoa could agree upon, and to recognize General Montero's Government upon the execution of such an instrument. This would have afforded an opportunity for the opening of negotiations, but Señor Novoa added the limitation that, if Congress did not approve the treaty so submitted, the recognition would be withdrawn. This was simply an impossible condition. The recognition of the Montero Government had to be positive. If Congress failed to approve, Chili could still prosecute the war until Peru was compelled to accept her terms, but such a contingent recognition was, in fact, only the old proposition of a treaty before recognition in another and much more illogical and embarrassing shape. Señor Novoa was willing to adopt another method. He would sign a treaty with General Montero, to be submitted and approved by the municipalities—that is, by the local authorities of the separate provinces. Such a method was entirely beyond General Montero's

constitutional powers, and would, I think, have led to the renewal of the difficulties between the various parties in Peru, who, accepting General Montero as the legitimate representative of the Government, would acquiesce in the regular action of the Executive and Congress. As Señor Novoa was either indisposed or unauthorized to move out of this vicious circle, our conferences terminated. I regret this the more, as I think the propositions offered a fair prospect of a serious negotiation. Chili can not obtain a peace which will give sanction and title to her acquisition of territory without the recognition of a legitimate government in Peru. Without a treaty with such authority the acquisition will be simply one of force, to be maintained as it has been acquired. The recognition of General Montero's Government will place upon him and upon the people of Peru the responsibility of making or rejecting peace, while the calling of



HENRY M. TELLER, SECRETARY OF THE INTERIOR.

[Born in Alleghany County, New York, May 23, 1830; was admitted to the bar in 1858; on the admission of Colorado into the Union in 1876, was elected a United States Senator from that State for the short term ending March 3, 1877; was re-elected for the full term ending March 3, 1883. On April 6, 1882, his appointment to a position in President Arthur's Cabinet was confirmed by the Senate, and he resigned his seat in that body.]

Congress will afford the opportunity to those who desire peace to do what they can not do under present circumstances—organize a party which can exert its influence directly, effectually, and legitimately in the Congress itself.

But I can not with justice conclude this dispatch without saying that I believe the reason which induces the hesitation of Chili is that she believes that, so long as the Peruvians are convinced that the United States will finally intervene, they never will negotiate in earnest. It is unquestionably true that the Peruvian Government does believe that the United States will intervene; at any rate, it considers that the question of intervention—as one of its leading officials expressed it to me—was still a pending question. It is obvious that neither Chili nor Peru will approach the solution of their difficulties in the proper spirit, or in any hope of a result satisfactory to both, as long as this impression lasts. If the United States intend to intervene effectively to prevent the disintegration of Peru, the time has come when that intention should be avowed. If it does not, still more urgent is the necessity that Chili and Peru should understand exactly where the action of the United States ends. It would be entirely beyond my duty to discuss the character or the consequences of either line of



conduct, but I trust that you will not deem that I am going beyond that duty in impressing upon the Government that the present position of the United States is an embarrassment to all belligerents, and that it should be terminated as promptly as possible. There is another conviction which it is clearly my duty to express. I believe that, whenever the United States formally withdraws from further intervention, Peru will apply to the European powers, and that a joint intervention of two or more is probable.



BENJAMIN H. BREWSTER, ATTORNEY-GENERAL.

[Born in New Jersey, October 16, 1816; graduated at Princeton College in 1834; admitted to the bar in 1837; Attorney-General of Pennsylvania from 1867 to 1869. His appointment as a member of President Arthur's Cabinet was confirmed by the Senate December 19, 1881.]

Subsequently Mr. James R. Partridge was sent as Minister to Peru, but apparently under instructions which left him little or no discretion for dealing with the complications existing between that country and its conqueror. The only official information made public on the subject is contained in the following response of the Secretary of State to an inquiry from the Senate:

DEPARTMENT OF STATE,  
WASHINGTON, February 27, 1883.

The Secretary of State, to whom was referred the following resolution of the Senate—

*Resolved*, That the President be respectfully requested, if not in his judgment incompatible with the public interest, to communicate to the Senate any information in his possession touching an alleged joint agreement between the Ministers of the United States, of Great Britain, of France, and Italy, now serving at Lima or Peru, to make a joint effort to bring about peace between Chili and Peru, and to inform the Senate whether the Minister of the United States has been instructed to invite or accept the mediation of European powers in the settlement of a purely American question—has the honor to report that he received a dispatch from Mr. Partridge, who stated that, for reasons therein given, the representatives of Great Britain, France, Italy, and the United States (Germany declining to take any part) were led to consider, at an informal meeting at Mr. Partridge's house, by what mode a solution of the existing difficulties might be reached. Mr. Partridge and his colleagues accordingly agreed on a memorandum which was to be sent by each of the Ministers to his own Government, as setting forth their views and hopes. The Ministers state in substance that they are unanimously of the opinion that each should declare to his Government that they believe the only possible means of bringing about a ces-

sation of hostilities, of saving Peru from complete destruction, and of arresting the ruin of neutrals, would be an agreement between the Governments to address representations to the Chilean Government, and cause it to understand that their wish is to see peace made on the basis of a cession of Tarapacá, reserving all further conditions for further negotiation. The Ministers further declare that they consider it a duty to invite their respective Governments to agree among themselves to take the step indicated at once as an urgent necessity. Upon the receipt of this dispatch Mr. Partridge was telegraphed by the Secretary of State, in substance, that the leave of absence which he had requested was granted, and that he was expected to return to the United States by the first steamer. He was further informed that the action set forth in his dispatch, having been taken by him without authority, was disapproved, and he was directed to so inform those of his colleagues who had acted with him. A telegram was at the same time sent to the Ministers of the United States in London, Paris, and Rome, informing them that Mr. Partridge had joined with the representatives of Great Britain, France, and Italy in a recommendation to their respective Governments to intervene in the Chili-Peru difficulties, and instructing them to inform the Governments to which they are respectively accredited that this action was taken by Mr. Partridge without authority, and has not been approved. Mr. Lowell has answered that this instruction has been complied with. In answer to the inquiry of the Senate, the Secretary of State has the honor to say that the Minister of the United States has not been instructed to invite or accept the mediation of European powers in the settlement of the difficulties there existing. Respectfully submitted,

FREDERICK T. FRELINGHUYSEN.

To the President.

There was an extended investigation during the summer, made by order of the House of Representatives, and conducted by its Committee on Foreign Affairs, into charges that the negotiations of the United States Government in 1881, in Peru, had been made subservient in some measure to the interests of certain claims upon the Peruvian Government, arising out of guano discoveries. The principal inquiry was, "Whether one or more Ministers Plenipotentiary of the United States were personally interested in or improperly connected with the business transactions in which the intervention of the Government was requested or expected in the affairs of Chili and Peru. The discussion of this branch of the inquiry was divided under three heads: 1. The condition of affairs in Chili and Peru which gave rise to the correspondence and business transactions referred to in the resolutions. 2. The history and claims of the parties who requested the intervention of the United States in the affairs of Chili and Peru. 3. Investigation as to the connection between Ministers Plenipotentiary of the United States and these parties, or any business transaction in which they requested or expected the intervention of the United States." After rehearsing the condition of the South American states and the differences which led to the war between Chili and Peru, the report continues: "It is alleged that from the beginning Chili was largely under English influence. Be that as it may, there can be little doubt that, as the fortunes of war steadily set against Peru, her people looked to



the United States for sympathy, if not actual interference in her behalf; while Chili, with her uniform success, became jealous of the power to which her rival looked for aid. As the war progressed adversely to Peru, holders of her bonds and other creditors, real or pretended, and speculators seeking to take advantage of her distress, were naturally interested in her affairs. It was evident that, overborne by Chili, she must either lose her autonomy, submit to a cession of territory, or provide for the payment of a heavy war indemnity. Rightly or wrongly, it was believed that the United States would have more influence than any of the powers in deciding which of these results should prevail. To her, therefore, the interested parties turned their attention, and sought by various methods her intervention in their behalf. We divide these into three: 1. The Cochet claimants; 2. The Landreau claimants; 3. The *Crédit Industriel*." After briefly reciting the grounds upon which each of these claims was based, the report says: "These three interests, the Cochet and the Landreau claimants and the *Crédit Industriel*, representing Peruvian bondholders, were exceedingly anxious that the United States should interfere in behalf of Peru, in order to preserve her autonomy, and enable her to discharge her pecuniary obligations. Their objects related wholly to business or speculation. Neither patriotism nor international policy had anything to do with them. They looked upon the nitrate-beds and guano deposits of Peru as the place whence were to come fortunes rivaling in magnificence and splendor anything Aladdin ever conjured, and the intervention by the United States was the magic lamp by which these creations were to be evoked."

The Peruvian Company was an organization formed for the purpose of prosecuting the Cochet claims chiefly, and its president, Jacob Shipherd, had attempted to secure the interposition of the United States Government in its behalf. Mr. Shipherd and ex-Secretary of State Blaine were among the leading witnesses before the investigating committee. The conclusion of the committee, on a thorough review of the testimony taken, was that the United States Ministers were not concerned in any improper transactions. A separate report was made by Mr. Belmont, of New York, who severely criticised the course of the State Department, in embarrassing the position and influence of the Government by giving countenance to the demands of the various claimants.

The only other important subject of diplomatic correspondence was the Isthmus Canal project, and the relation thereto of the Clayton-Bulwer treaty. (See "Annual Cyclopædia," 1881, PANAMA CANAL.) On May 8th Secretary Frelinghuysen addressed to Minister Lowell a reply to Lord Granville's letter of January 7th. In this he said:

A canal across the isthmus for vessels of all dimen-

sions and every character, under possible conditions herein after referred to, would affect this republic in its trade and commerce; would expose our Western coast to attack; destroy our isolation; oblige us to improve our defenses and to increase our navy, and possibly compel us, contrary to our traditions, to take an active interest in the affairs of European nations. The United States, with its large and increasing population and wealth, can not be uninterested in a change in the physical conformation of this hemisphere which may injuriously affect either the material or political interests of the republic, and naturally seek that the severance of the Isthmus connecting the continents shall be effected in harmony with those interests. This Government, while believing that the Isthmus should not be severed so as to do unnecessary injury to the United States, at the same time appreciates the desire of Great Britain that she should be able, by a short and easy passage from ocean to ocean, to reach her Eastern and American possessions on the Pacific, and that other nations of the world have a similar interest in such a passage. There is, however, no necessary conflict between the political claims of the United States in this matter and the material interests of other nations. A canal across the Isthmus can be created, and, under the protectorate of the United States and the republic whose territory it may cross, can be freely used by all nations. Thus, in some degree, would be continued to the United States the benefit of that conformation of the earth which is now an element of security and defense. . . .

The President, therefore, considers it unnecessary and unwise through an invitation to the nations of the earth to guarantee the neutrality of the transit of the Isthmus, to give their navies a pretext for assembling in waters contiguous to our shores, and to possibly involve this republic in conflicts from which its natural position entitles it to be relieved.

It will doubtless occur to Lord Granville, as it does to us, that international agreements of this kind calling for interference by force, and conferring joint rights upon several independent powers, are calculated to breed dissension and trouble. In times of peace, when there is no call for their exercise, they are harmless, though useless. But, when wars and trouble come, it too frequently happens that differences arise, and so, at the very moment when the agreement should be enforced, it is impossible to enforce it; and such agreements would lead to that political intervention in American affairs which the traditional policy of the United States makes it impossible that the President should either consent to or look upon with indifference.

Mr. Frelinghuysen proceeded to set forth the history and purpose of the "Monroe doctrine," and said:

It is true that this doctrine refers to the political and not to the material interest of America; but no one can deny that to place the Isthmus under the protection and guarantee of the powers of Europe, rather than under the protection of the leading power of this hemisphere, would seriously threaten and affect the political interest of that power.

It is not to be anticipated that Great Britain will controvert an international doctrine which she suggested to the United States, when looking to her own interest, and which, when adopted by this republic, she highly approved; and it is but frank to say that the people of this country would be as unwilling that the pathway of commerce between the Pacific coast and our Eastern market should be under the dominion of the allied European powers as would be the people of Great Britain that the transit from one to another part of her possessions should be under such control.

He then recounted the history of the Clayton-Bulwer Treaty, and the changed condition of things since it was entered into, and concluded as follows:



I may then state the President's views on the whole subject, which I do with an assurance that they will meet with a candid consideration from Lord Granville, and with the hope that they may be substantially concurred in by her Majesty's Government.

The Clayton-Bulwer Treaty was concluded to secure a thing which did not exist and which now never can exist. It was to secure the construction of a canal under the grant of 1849 from Nicaragua that the United States consented to waive the exclusive and valuable rights which had been given to them; that they consented to agree with Great Britain that they would not occupy, fortify, colonize, or assume dominion over any part of Central America, and that they consented to admit her Majesty's Government at some future day to a share in the protection which they have exercised over the Isthmus of Panama.

The Government and people of the United States, though rich in land and industry, were poor in money and floating capital in 1850. The scheme for a canal, even without the complications of the Mosquito protectorate, was too vast for the means of the Americans of that day, who numbered then considerably less than one half of their numbers to-day. They went to England, which had what they had not, surrendered their exclusive privileges, offered an equal share of all they had in those regions, in order, as expressed in the seventh article of the treaty, "that no time should be unnecessarily lost in commencing and constructing the said canal." Through no fault of theirs time was unnecessarily lost, the work was never begun, and the concession failed.

The President does not think that the United States are called upon by any principle of equity to revive those provisions of the Clayton-Bulwer Treaty which were specially applicable to the concession of August, 1849, and apply them to any other concession which has been since or may hereafter be made. The conditions of 1882 are not those of 1852. The people of the United States have now abundance of surplus capital for such enterprises, and have no need to call upon foreign capitalists. The legislative branch of the Government of the United States may also desire to be free to place the credit of the United States at the service of one or more of these enterprises. The President does not feel himself warranted in making any engagement or any admission respecting the extinct provisions of the Clayton-Bulwer Treaty which would prevent or interfere with such a purpose. On the contrary, frankness requires him to say that, as the persons who held the grant which the United States understood to be accepted by the two governments under the provisions of the treaty have not "carried out the proposed enterprise," the United States esteem themselves competent to refuse to afford their protection, jointly with Great Britain, to any other persons or company, and hold themselves free hereafter to protect any interoceanic communication in which they or their citizens may become interested in such way as treaties with the local sovereign powers may warrant and their interests may require.

There are some provisions of the treaty which the President thought might be advantageously retained. With this purpose the present correspondence was opened by the note to you of the 19th November last, in which these points were indicated. The President is still ready, on the part of the United States, to agree that the reciprocal engagements respecting the establishment of a free port at each end of whatever canal may be constructed shall continue in force, and to define by agreement the distance from either end of the canal where captures may be made by a belligerent in time of war, and with this definition thus made to keep alive the second article of the treaty. He hopes that Lord Granville, on future consideration, may not be averse to revising his opinion that such agreements would not be beneficial.

To the suggestion made by Lord Granville, at the close of his note of January 7th, that the United States should take the initiative in an invitation to other powers to participate in an agreement based

upon the convention of 1850, the President is constrained, by the considerations already presented, to say that the United States can not take part in extending such an invitation, and to state with entire frankness that the United States would look with disfavor upon an attempt at a concert of political action by other powers in that direction.

It is not necessary to observe that there is no provision of the Clayton-Bulwer Treaty which authorizes Great Britain to invite or obliges the United States to accept the aid of other nations to protect or to guarantee the neutrality of the Panama route.

Fortunately the want of harmony in the views of the two governments can have at present no injurious influence. No canal yet exists across the Isthmus, and in the natural course of events some time must elapse before one can be constructed; meanwhile the points of divergence between her Majesty's Government and that of the United States may disappear. The President hopes that, long before the subject becomes one of practical importance, her Majesty's Government may be brought to see that the interests of Great Britain and the United States in this matter are identical, and are best promoted by the peaceful policy which he has marked out for this country.

The most authentic information regarding the progress of the work of constructing the canal at Panama is to be found in a report by Lieutenant Rodgers, of the United States Navy, who by order of Admiral Cooper passed over the line late in the year, and examined the plans and condition of the work. In a brief recapitulation of the progress made he said: "The engineers and other employés of the company arrived in Aspinwall at the beginning of 1881. The line of the canal was not then fixed, nor was any part of it cleared; no docks and but little property belonged to the company, so that it was extremely difficult to lodge the employés and to receive the material. In brief, it may be said that wharves have been constructed, ground purchased or made, large quantities of machinery received and put up, villages and workshops built along the line, hospitals erected at Panama and Aspinwall, the line of the canal definitely fixed and its route cleared to a width of 100 metres, and that the work of excavation, which has been delayed by the slow arrival of the necessary machinery, will, within a month, be begun at several points." Lieutenant Rodgers found about 1,500 to 1,600 workmen and navvies employed, at wages varying from \$1.20 to \$2 per day. Several contracts had been made for the excavation of portions of the canal, and a large amount of machinery, including heavy steam dredges, had been procured for the work of excavation under the company's own direction. From conversation with the officers of the company, as well as with others acquainted with affairs on the Isthmus, and from personal observation of the works, drawings, and plans, Lieutenant Rodgers drew the following conclusions:

"That the preliminary work of fixing and clearing the route, of erecting docks, quarters, machine-shops, machinery, rolling-stock, etc., and the accumulating of material and *personnel* have been so far advanced that the work of excavation will be vigorously begun by the beginning of the next dry season; that the work



of excavation has already been begun at two points on the line; that the increase of means of transportation, which has heretofore been insufficient, and the completion of machinery now on the Isthmus will soon enable the work to advance rapidly; that there can no longer be doubt as to the intention of the company to carry out the proposed plan of this canal. The date fixed by M. de Lesseps for its completion is 1888, and the present superior agent, Captain Richier, is sanguine that this will be accomplished. He also believes that the canal can be made for the amount estimated—600,000,000 francs. But I infer from conversation with canal engineers and with others well versed in affairs that the canal will not be finished for some years later, and that the cost will largely exceed the estimate. And it seems probable that this will undergo the experience of many other great projects—that the original subscribers must again subscribe or lose their venture, and that new stockholders will be the ones to share the profits. Up to the present date about 180,000,000 francs have been expended. In this amount the cost of all machinery, ordered or received, is included, as well as the purchase of property. The cost of the Panama Railway, believed to be about \$17,000,000, however, is not included in this amount, special arrangements having been made for its purchase. A short time since the eminent New York engineer, Mr. Stevens, was invited to inspect the works and the studies for plans. I hear he suggested that two or three locks be introduced in order to simplify the difficulties and to lessen the cost of construction. But a canal *à niveau* has been determined upon, and is to be built if the money can be raised, and the climate does not prove too deadly to the laborers. It seems probable that, with the work well begun and advanced, neither difficulty will prove insurmountable." (See COLOMBIA and RODGERS.)

UNITED STATES, CENSUS OF. In the

"Annual Cyclopædia" for 1881 were given the most important returns of the census of 1880 then reported. Additional results are given in the following pages, and statistics relating to special topics will be found in this volume under the titles: COTTON PRODUCT AND MANUFACTURES; CRIMINAL JURISPRUDENCE; EDUCATION AND ILLITERACY; FARMS; INDEBTEDNESS OF THE UNION, AND OF THE STATES, CITIES, COUNTIES, ETC.; INSURANCE; MANUFACTURES OF THE UNITED STATES; RAILROADS; and TELEGRAPHS AND TELEPHONES.

Of the total population (50,155,783) in 1880, 25,518,820 were male and 24,636,963 female. The number of males eighteen to forty-four years of age, both inclusive, was 10,231,239; the number of males twenty-one years of age and over was 12,830,349; the total population ten years of age and over was 36,761,607. The number of persons to the square mile, excluding the Territory of Alaska and the Indian Territory, was 17.29. The number of dwellings in the United States was 8,955,812; persons to a dwelling, 5.6; number of families, 9,945,916; persons to a family, 5.04. The urban population of the United States, from 1790 to 1880, is shown in the following table:

DATE.	Population of United States.	No. of cities.	Population of cities.	Inhabitants of cities in each 100 of the total population.
1790.....	3,929,214	6	131,472	3.3
1800.....	5,308,488	6	210,873	3.9
1810.....	7,239,881	11	356,920	4.9
1820.....	9,638,822	13	475,135	4.9
1830.....	12,866,020	26	864,509	6.7
1840.....	17,069,453	44	1,458,994	8.5
1850.....	23,191,876	85	2,897,586	12.5
1860.....	31,443,321	141	5,072,256	16.1
1870.....	35,558,371	226	8,071,875	20.9
1880.....	50,155,783	286	11,815,547	22.5

The percentage of increase of population during twenty years in the several States and Territories has been as follows:

STATES AND TERRITORIES.	1870 to 1880.	1860 to 1870.	STATES AND TERRITORIES.	1870 to 1880.	1860 to 1870.
Alabama.....	26.6	3.4	Missouri.....	25.9	45.6
Arizona.....	318.7	.....	Montana.....	90.1	.....
Arkansas.....	65.6	11.2	Nebraska.....	267.8	326.4
California.....	54.3	47.4	Nevada.....	46.5	519.6
Colorado.....	387.4	16.2	New Hampshire.....	9.0	*2.3
Connecticut.....	15.8	16.3	New Jersey.....	24.8	34.8
Dakota.....	853.2	193.1	New Mexico.....	30.1	*1.7
Delaware.....	17.2	11.4	New York.....	15.9	12.9
District of Columbia.....	34.8	75.4	North Carolina.....	30.6	7.9
Florida.....	43.5	33.7	Ohio.....	19.9	13.9
Georgia.....	30.2	11.9	Oregon.....	92.2	73.3
Idaho.....	117.4	.....	Pennsylvania.....	21.6	21.1
Illinois.....	21.1	48.3	Rhode Island.....	27.2	24.4
Indiana.....	17.7	24.4	South Carolina.....	41.0	0.2
Iowa.....	36.0	76.9	Tennessee.....	22.5	19.4
Kansas.....	173.8	299.9	Texas.....	65.8	115.4
Kentucky.....	24.3	14.3	Utah.....	0.5	4.9
Louisiana.....	29.3	2.6	Vermont.....	23.4	14.4
Maine.....	8.5	*0.2	Virginia.....	213.5	106.6
Maryland.....	19.7	13.6	Washington.....	39.9	.....
Massachusetts.....	22.3	18.3	West Virginia.....	24.7	85.9
Michigan.....	33.2	58.0	Wisconsin.....	127.9	.....
Minnesota.....	77.5	155.6	Wyoming.....	.....	.....
Mississippi.....	36.6	4.6			

\* Decrease.

+ Of Virginia and West Virginia together.

OCCUPATIONS.—The total number of persons pursuing gainful vocations in 1880 was as follows:

CLASSES.	Persons occupied.	AGE AND SEX.							
		All ages.		Ten to fifteen.		Sixteen to fifty-nine.		Sixty and over.	
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Agriculture.....	7,670,498	7,075,983	594,510	584,867	185,862	5,888,133	495,920	602,983	22,728
Professional and personal services.....	4,074,288	2,712,943	1,361,295	127,565	107,380	2,446,962	1,215,189	138,416	88,276
Trade and transportation.....	1,810,256	1,750,892	59,364	26,078	2,547	1,672,171	54,849	52,643	1,968
Manufacturing, mechanical, and mining.....	3,837,112	3,205,124	631,988	86,677	46,980	2,978,845	577,157	139,602	7,901
All occupations.....	17,392,099	14,744,942	2,647,157	825,187	298,169	12,956,111	2,238,115	938,644	70,878

From this exhibit it appears that the aggregate number of persons returned as having gainful vocations was 17,392,099, being 34·68 per cent of the entire population of 1880, and 47·31 per cent of the population ten years of age and upward. In 1870 the total number of persons borne on the lists of occupations was 12,505,923, being 32·43 per cent of the population of that date and 44·3 per cent of the population ten years of age and upward. It thus appears that the tables of occupation in 1880

embrace a larger part of the total population than those for 1870. The number of persons ten years of age and upward was 28,228,945 in 1870, and 36,761,607 in 1880, an increase of 30·23 per cent. Applying this ratio of increase to the reported occupations of 1870, and by turns to the number in each of the four great classes, the results as compared with the actual numbers returned in 1880 show an excess of 1,105,636, and are as follow:

CLASSES.	Occupations, 1870.	Increased by 30·23 per cent.	Actual number returned in 1880.	Excess.	Deficiency.
Agriculture.....	5,922,471	7,712,884	7,670,498	.....	42,341
Professional and personal services.....	2,684,798	3,496,406	4,074,288	577,832	.....
Trade and transportation.....	1,191,238	1,551,849	1,810,256	258,907	.....
Manufacturing, mechanical, and mining industries.....	2,707,421	3,525,574	3,837,112	311,238	.....
All occupations.....	12,505,923	16,286,463	17,392,099	1,105,636	.....

This comparison of the number of occupations returned in 1870, increased by the rate of increase which took place during the decade in the population over ten years of age, with the number of occupations actually returned in 1880, shows a deficiency in the agricultural class to the extent of 42,341; an excess of 577,832 in the class rendering professional and personal services; 258,907 in that engaged in trade and transportation, and 311,238 in that engaged in manufactures or mechanical and mining industries—making a net excess of 1,105,636 in all classes of occupations. "There is reason to believe," says the census report, "that the deficiency in the agricultural class and the marked increase in the class rendering professional and personal services is due, in some measure, to the reporting of persons as 'laborers' simply who should have been returned as 'agricultural laborers.' In some parts of the country, where agriculture is in a high degree predominant, there is doubtless a certain tendency to drop the qualifying adjective and speak of 'laborers' simply. Whenever it has been within the power of the Census-Office to apply a correction to this error it has been done, yet there probably remains a certain amount of fallacious classification re-

sulting from the failure of enumerators duly to characterize this class of persons. It is also probable that the class of 'laborers' embraces considerable numbers of persons who are employed in connection with manufacturing establishments with sufficient regularity to justify their inclusion in the manufacturing class, were the facts known."

Of the total excess (1,105,636) of occupations in 1880 over 1870, nearly one quarter is of females, the number of females reported as pursuing gainful occupations having increased between 1870 and 1880 in a higher ratio than the number of males. Thus:

Number of females in gainful occupations in 1870.. 1,836,288  
Increased by the ratio of increase in the female population since 1870, viz., 29·03 per cent..... 2,569,862  
Actual number returned in 1880..... 2,647,157

Relative excess..... 277,795

Of this excess about two thirds appears in the class of manufacturing, mechanical, and mining industries, showing the effect upon the employment of women by the extension of the factory system. In examining how the same excess is distributed according to age, it is found that a disproportionate share falls in the class between ten and fifteen years of age, showing a further effect of the extension of the



factory system in the increased employment of young children. Thus:

Number of persons of both sexes between ten and fifteen years of age reported in 1870 as in gainful occupations .....	789,164
Increased by 18.65 per cent, the ratio of increase in the population of this age from 1870 to 1880 .....	877,018
Actual number reported .....	1,118,356
Relative excess .....	241,838

The following is a comparison between the number of persons reported as pursuing gainful occupations in 1880 with those who were not so reported. That is, of the 36,761,607 persons ten years of age and upward, the number not reported as pursuing gainful occupations is 19,369,508. Of this number, 15,378,470 are females.

	Aggregate.	Total ten years and upward.		Ten to fifteen.		Sixteen to fifty-nine.		Sixty and over.	
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Population (ten years of age and upward) .....	36,761,607	18,785,980	18,025,627	8,376,114	8,278,869	18,907,444	18,377,002	1,452,422	1,375,250
Number on occupation tables .....	17,392,099	14,744,942	2,647,157	825,187	298,169	12,956,111	2,238,115	938,644	70,873
	19,369,508	8,991,038	15,378,470	2,550,927	2,980,200	921,333	11,098,887	518,778	1,304,388

The following table shows the comparative increase in occupations and in population by States and Territories, from 1870 to 1880:

STATES AND TERRITORIES.	ALL OCCUPATIONS.			Increase in population.
	1880.	1870.	In-crease.	
	Number.	Number.	Per ct.	
Alabama .....	492,790	365,253	35	27
Arizona .....	22,271	6,030	269	319
Arkansas .....	260,692	183,949	92	66
California .....	376,505	238,643	58	54
Colorado .....	101,251	17,533	476	387
Connecticut .....	241,393	193,421	25	16
Dakota .....	57,344	5,387	839	853
Delaware .....	54,580	40,313	35	17
District of Columbia .....	66,624	49,041	36	35
Florida .....	91,536	60,703	51	44
Georgia .....	597,562	444,573	34	30
Idaho .....	15,575	10,579	43	117
Illinois .....	999,780	742,015	35	21
Indiana .....	635,080	459,369	38	18
Iowa .....	523,302	344,276	53	36
Kansas .....	322,285	123,852	160	173
Kentucky .....	519,554	414,593	25	25
Louisiana .....	368,228	256,452	42	29
Maine .....	281,993	208,225	11	4
Maryland .....	324,492	258,543	25	20
Massachusetts .....	720,774	579,544	24	22
Michigan .....	589,204	404,164	41	38
Minnesota .....	255,125	192,657	92	73
Mississippi .....	415,506	318,350	30	37
Missouri .....	602,959	505,556	37	26
Montana .....	22,255	14,043	58	90
Nebraska .....	152,614	48,337	248	263
Nevada .....	82,233	26,911	20	47
New Hampshire .....	142,468	120,168	19	9
New Jersey .....	396,379	296,036	34	25
New Mexico .....	40,322	29,361	39	30
New York .....	1,584,645	1,491,018	26	16
North Carolina .....	480,187	351,299	37	31
Ohio .....	994,475	840,589	18	20
Oregon .....	67,348	80,551	120	92
Pennsylvania .....	1,466,067	1,020,544	43	22
Rhode Island .....	116,979	88,574	32	27
South Carolina .....	392,102	203,801	49	41
Tennessee .....	447,970	367,987	92	23
Texas .....	523,133	237,125	120	94
Utah .....	40,055	21,517	86	66
Vermont .....	118,584	108,763	9	1
Virginia .....	404,240	412,685	20	23
Washington .....	80,122	9,760	209	214
West Virginia .....	176,199	115,229	53	40
Wisconsin .....	417,455	292,208	43	25
Wyoming .....	8,884	6,645	34	128
The United States ..	17,392,099	12,505,923	39	30

The noteworthy results shown by the foregoing table are thus pointed out and explained in the census report:

1. That in certain States and Territories the ratio of

increase in population is greater, in some cases much greater, than the ratio of increase in gainful occupations reported. This is due to the fact that these communities are losing something of the frontier character and taking on more of the social and domestic character of older communities. Thus we have Arizona gaining 319 per cent in population and only 269 per cent in reported occupations; Idaho, 117 against 43; Kansas, 173 against 160; Montana, 90 against 58; Nebraska, 268 against 248; Nevada, 47 against 20; Washington, 214 against 209; Wyoming, 128 against 34. In a word, these figures indicate the growth of homes with women and children, in the place of the lumbering-camp or the ranch, occupied by men only, all of whom were workers.

2. In another group of States and Territories, where we must suppose that the same force which has produced the above-noted effects is in operation, the rapid incoming of immigrants during the decade, predominately males of adult years, has overpowered this force and caused an increase in the proportion of bread-winners greater than the increase in population. Such are Arkansas, Colorado, Dakota, Iowa, Minnesota, New Mexico, Oregon, Texas, and Utah.

3. Throughout the country generally we have an increase of occupations reported greater than the increase of population. In part this is probably due to the closer enumeration conducted under the provisions of the act of March 3, 1879, which, by making the districts smaller, secured in a much higher degree than had previously been attained that house-to-house canvass which is essential to a correct census, especially as regards the details of enumeration.

In a still higher degree probably the increase of reported occupations is due to the growth of the factory system, to the minuter organization of industry, and to the resulting differentiation of occupations, allowing women and children to find places where they can be useful and earn a livelihood, both in trade and in manufactures, more readily than was the case ten years ago.

We group as follows the States and Territories in their inverse rank, according to the proportion of the total population found in gainful occupations:

	Percentage of occupations to total population.
Utah, West Virginia .....	28
Tennessee .....	29
Ohio .....	31
Arkansas, Illinois, Indiana, Kansas, Kentucky, Missouri, Wisconsin .....	32
Iowa, Minnesota, Texas, Virginia .....	33
Florida, Nebraska, New Mexico, North Carolina, Pennsylvania .....	34
Maryland, Michigan, New Jersey .....	35
Maine, Vermont .....	36
Delaware, Mississippi, New York .....	37
District of Columbia .....	38
Alabama, Connecticut, Georgia, Louisiana, Oregon, South Carolina .....	39

Percentage of occupations  
to total population.

Massachusetts, Washington Territory.....	40
New Hampshire.....	41
Rhode Island.....	42
Dakota, Wyoming.....	43
California.....	44
Idaho.....	43
Colorado, Nevada.....	52
Arizona.....	55
Montana.....	57

We note here, first, that in the great prosperous grain-raising States there is a tendency to keep down the proportion of bread-winners (see the States having less than 33 per cent); second, that the tendency in the cotton-raising States is to a higher percentage of bread-winners, women and children going more largely into the fields; third, that the manufacturing States have also a high percentage, owing to the employment of these classes in shops and factories; and, fourth, that the bread-winners reach their largest proportion in the mining and grazing States and Territories, owing both to the character of the industries there pursued and also to the small number, relatively, of women and children in those regions.

The following table exhibits the total number of occupations reported in each of the principal fifty cities of the United States, and the proportion existing between that number and the total number of inhabitants of both sexes and all ages:

CITY.	Population.	Total in occupation tables.	Percentage.
	Number.	Number.	
Albany, N. Y.....	90,758	32,153	35
Allegheny, Pa.....	78,682	25,958	33
Atlanta, Ga.....	87,409	17,078	46
Baltimore, Md.....	892,813	130,364	39
Boston, Mass.....	362,839	149,194	41
Brooklyn, N. Y.....	565,668	209,065	37
Buffalo, N. Y.....	155,134	54,647	35
Cambridge, Mass.....	52,669	20,021	38
Camden, N. J.....	41,659	15,935	36
Charleston, S. C.....	49,984	20,325	41
Chicago, Ill.....	508,185	191,760	38
Cincinnati, O.....	255,139	100,454	39
Cleveland, O.....	160,146	56,919	36
Columbus, O.....	51,647	18,737	36
Dayton, O.....	38,678	14,184	37
Denver, Col.....	35,629	15,737	44
Detroit, Mich.....	116,840	39,245	34
Fall River, Mass.....	48,961	22,685	46
Hartford, Conn.....	42,015	17,212	41
Indianapolis, Ind.....	75,056	27,966	37
Jersey City, N. J.....	120,722	42,856	35
Kansas City, Mo.....	55,785	25,081	45
Lawrence, Mass.....	39,151	19,153	49
Louisville, Ky.....	123,758	45,244	37
Lowell, Mass.....	59,475	29,781	50
Lynn, Mass.....	88,274	16,723	44
Milwaukee, Wis.....	115,567	40,900	35
Minneapolis, Minn.....	46,887	21,802	45
Nashville, Tenn.....	48,850	16,738	39
Newark, N. J.....	136,508	49,066	36
New Haven, Conn.....	62,882	24,155	38
New Orleans, La.....	216,090	78,386	36
New York, N. Y.....	1,206,229	513,377	43
Paterson, N. J.....	51,031	22,570	44
Philadelphia, Pa.....	847,170	848,900	41
Pittsburg, Pa.....	156,389	52,173	33
Providence, R. I.....	104,837	43,573	42
Reading, Pa.....	48,278	15,023	36
Richmond, Va.....	63,600	24,530	39
Rochester, N. Y.....	89,366	34,276	38
St. Louis, Mo.....	380,518	139,985	40
St. Paul, Minn.....	41,473	17,509	43
San Francisco, Cal.....	235,959	104,650	45
Seranton, Pa.....	45,850	16,329	37
Syracuse, N. Y.....	51,792	20,409	39
Toledo, O.....	50,137	17,091	35
Troy, N. Y.....	56,747	23,745	42
Washington, D. C.....	147,293	57,262	39
Wilmington, Del.....	42,473	19,281	45
Worcester, Mass.....	58,291	22,535	39

The above shows that the proportion between the number of persons pursuing gainful occupations and the total population enumerated varies in the several cities in the foregoing list from 33 per cent as a minimum to 50 per cent as a maximum, i. e., from one third to one half—a much narrower range than we noted in the case of the States. The rank of these cities in this respect is as follows:

	Percentage.
Allegheny, Pittsburg.....	33
Detroit.....	34
Albany, Buffalo, Jersey City, Milwaukee, Toledo.....	35
Camden, Cleveland, Columbus, Newark, New Orleans, Reading.....	36
Brooklyn, Dayton, Indianapolis, Louisville, Scranton..	37
Cambridge, Chicago, New Haven, Rochester.....	38
Baltimore, Cincinnati, Nashville, Richmond, Syracuse, Washington, Worcester.....	39
St. Louis.....	40
Boston, Charleston, Hartford, Philadelphia.....	41
Providence, Troy.....	42
New York, St. Paul.....	43
Denver, Lynn, Paterson.....	44
Kansas City, Minneapolis, San Francisco, Wilmington, Atlanta, Fall River.....	45
Lawrence.....	49
Lowell.....	50

These results are thus explained in the census report:

The facts which explain these wide variations in the proportions between the number of persons pursuing gainful occupations and the total population of a city are many. The most important may be grouped under three heads: First, the deviations of the respective populations of these cities to the one side or to the other from the type of a normal population, considered as to age and sex; secondly, the character of the prevailing occupations of the several cities, as determining the question whether women and children shall be largely employed or not; thirdly, social causes, affecting the employment of women in avocations of a certain class, or affecting the employment of children under a certain age.

The variation of the population of a city either way from the type may affect the proportion of the inhabitants who shall be employed in gainful occupations, either to diminish or to increase it, according to circumstances. Thus, going to a far Western city like Kansas City, Minneapolis, or Denver, we shall find the population composed more largely of males than of females, and containing a larger proportion of adults of the working age than is found in a normal population. This is due to the fact that great numbers of the inhabitants of any one of these cities have recently gone thither to seek their fortunes, leaving the women, the children, and the aged behind in the older communities from which they came. Here a high percentage of actual bread-winners is naturally expected. On the other hand, turning to Lowell, Lawrence, and Fall River, where females and children are largely in excess, we find an even higher percentage of bread-winners. This seems like a contradiction. The explanation is found in the factory industries of these cities, which provide employment for enormous numbers of women, who in a Western city would be living at home keeping the house, and of children who, under the same conditions, would be attending school or living at home without gainful occupation.

The influence of the prevailing industries of a city upon the proportion of bread-winners is too familiar to require to be illustrated. The two great iron-making cities of Allegheny and Pittsburg keep only a bare third of their population at work, because the labor of women and children would be of little account. Cleveland, another great iron-making city, has but 36 per cent of its population engaged in gainful occupations; but a great center of the textile industries, like Paterson, Fall River, Lawrence, or



Lowell, keeps nearly or quite one half of its men, women, and children at work. Philadelphia, which is both a great weaving city and a center of heavy manufactures, especially of iron, stands in a mean between the two, having 42 per cent of its population engaged in gainful occupations.

Among the social causes adverted to as affecting the proportion of bread-winners may be mentioned the school system. In some cities the public schools are much more highly organized, more attractive, and are supported by a stronger public sentiment than in others. In the former class of cases we should look to see the influence of the schools acting in diminution of the number of young persons of either sex engaged in gainful occupations.

**FOREIGN-BORN POPULATION.**—The total number of foreign-born persons in the United States in 1880 was 6,679,943; in 1870 the number was 5,567,229. The following shows the nativity of the foreign-born population of 1880:

Africa, not specified	2,204
Asia, not specified	1,054
Atlantic islands	7,512
Australia	4,906
Austria proper	98,068
Belgium	15,585
Bohemia	85,361
British America, total	717,157
Canada	610,090
New Brunswick	41,788
Newfoundland	4,789
Nova Scotia	51,160
Prince Edward Island	7,537
British America, not specified	1,793
Central America	707
China	104,468
Cuba	6,917
Denmark	64,196
Europe, not specified	9,814
France	106,971
German Empire, total	1,066,742
Baden	137,885
Bavaria	171,699
Brunswick	4,624
Hamburg	8,854
Hanover	102,594
Hessen	72,400
Lübeck	264
Mecklenburg	45,959
Nassau	6,253
Oldenburg	9,924
Prussia, not specified	624,880
Saxony	43,708
Welmur	635
Württemberg	108,223
Germany, not specified	624,200
Gibraltar	167
Great Britain, total	2,772,169
England	662,676
Ireland	1,854,571
Scotland	170,186
Wales	83,802
Great Britain, not specified	1,434
Greece	776
Greenland	129
Holland	58,090
Hungary	11,526
India	1,707
Italy	44,230
Japan	401
Luxemburg	12,586
Malta	305
Mexico	68,399
Norway	181,729
Pacific islands	806
Poland	43,557
Portugal	8,188
Russia	35,722
Sandwich Islands	1,147
South America	4,566
Spain	5,121
Sweden	194,887
Switzerland	88,621
Turkey	1,205
West Indies	9,484
At sea	4,068
<b>Total</b>	<b>6,679,943</b>

**FOREIGN PARENTAGE.**—In 1870 the number of persons, whether themselves born abroad or in the United States, one or both of whose parents were foreigners, was ascertained and reported by the census for the first time. The statistics of foreign parentage for 1870, however, gave no clew to the contribution made to this total by the several foreign countries appearing in the tables of foreign birth; i. e., there was nothing to show how many persons had German fathers or German mothers, how many Irish fathers or Irish mothers, etc. In compiling the census of 1880 a very elaborate tabulation was undertaken, in order to secure the ratios of contribution to the population foreign in the second degree made by each principal foreign country. For this purpose the populations of 28 States, 7 Territories, and the District of Columbia were tallied according to a highly complicated form in order to secure the ratios desired. The application of these ratios to the total number of persons residing within the United States who were born in each of the specified foreign countries, according to the table of nativity, would indicate that throughout the United States there were, at the date of the census of 1880, persons having one or both parents foreign born, or foreign-born persons having parents both native born, as follow:

Number having Irish fathers	4,529,523
Number having German fathers	4,883,842
Number having British fathers	2,639,508
Number having Scandinavian fathers	635,405
Number having British-American fathers	989,247
Number having fathers born in countries other than those specified	1,321,485
Number having native fathers and foreign mothers	573,434
Number of foreign persons having both parents native	83,252

**Total**..... 14,955,996

Number of persons having Irish mothers	4,448,421
Number having German mothers	4,557,629
Number having British mothers	1,790,200
Number having Scandinavian mothers	631,309
Number having British-American mothers	931,403
Number having mothers born in countries other than those specified	1,226,113
Number having native mothers and foreign fathers	1,337,664
Number of foreign persons having both parents native	38,252

**Total**..... 14,955,996

**DEFECTIVE, DEPENDENT, AND DELINQUENT CLASSES.**—The following table shows the number of insane, idiotic, blind, and deaf-mutes in the United States, as returned by the last four censuses:

CLASS.	1880.	1870.	1860.	1850.
Insane	91,997	37,432	24,042	15,610
Idiots	76,895	24,527	18,930	15,787
Blind	48,928	20,320	12,658	9,794
Deaf-mutes	33,578	16,205	12,821	9,508
<b>Total</b>	<b>251,698</b>	<b>98,484</b>	<b>68,451</b>	<b>50,994</b>

The total population for each of the years named was as follows: In 1850 it was 23,191,876; in 1860, 31,443,321; in 1870, 38,558,871; and in 1880, 50,155,783. In other words, although the population has a little more than

doubled in thirty years, the number of defective persons returned is nearly five times as great as it was thirty years ago. During the past decade (or since 1870) the increase in population has been 30 per cent; but the apparent increase in the defective classes has been a little more than 155 per cent. "It is not possible," says Special Agent Frederick H. Wines, "to believe that there has, in fact, been any such increase of the defective classes as is indicated by the figures given in the tables above. The inference is irresistible that either the enumeration in 1880 is excessive, or else it was incomplete in 1870 and in the years previous." After pointing out the difficulty of getting accurate statistics on these subjects, Mr. Wines expresses the belief that, in the census of 1880, "a much more perfect enumeration of the defective classes, especially of the insane and idiotic, has been secured than ever before in the history of this or, perhaps, of any other nation." Admitting that "it would be claiming too much to assert that the census lists are, even after all the labor bestowed upon them, absolutely accurate," he believes

that the figures are "as nearly correct as it is possible to make them at the present time with our present facilities for procuring them."

Of 91,997 insane in the United States in 1880, there were in hospitals and asylums for the insane (not including those in almshouses) 40,942, or over 44 per cent of the entire number; of 76,895 idiots, there were in training-schools for the feeble-minded 2,429, or a little over 3 per cent; of 48,928 blind, there were in schools and industrial homes for the blind 2,158, or less than 4½ per cent; and of 33,878 mutes, there were in schools for the deaf (not counting those under instruction in day-schools, and so not enumerated) 5,267, or nearly 16 per cent. "This statement," says Mr. Wines, "may serve to give a summary notion of the urgency of the demand for institutions of the several descriptions named, both in the aggregate and in proportion to the number of individuals in each of the four great defective classes."

The following exhibit shows the number in 1880 in each of the four classes by sex, nativity, and race:

CLASS.	Total.	Male.	Female.	Native.	Foreign.	White.	Colored.
Insane.....	91,997	44,408	47,589	65,651	26,346	85,840	*6,157
Idiots.....	76,895	45,309	31,586	72,888	4,007	67,816	†9,579
Blind.....	48,928	26,748	22,180	40,569	8,329	41,278	‡7,650
Deaf-mutes....	33,878	18,567	15,311	80,507	3,371	80,661	§9,217
Total.....	251,693	135,032	116,666	209,645	42,053	225,095	26,603

The number of persons in every 100,000 in each of the classes named, who are male or female, native or foreign, white or colored, is as follows:

CLASS.	Total.	Male.	Female.	Native.	Foreign.	White.	Colored.
Insane.....	100,000	48,271	51,729	71,862	28,693	98,307	6,693
Idiots.....	100,000	58,928	41,077	94,789	5,211	87,543	12,457
Blind.....	100,000	54,668	45,332	82,977	17,023	84,365	15,635
Deaf-mutes....	100,000	54,805	45,195	90,050	9,950	90,504	9,496
Total.....	100,000	53,648	46,352	83,292	16,708	89,431	10,569

"From this table," says Mr. Wines, "it appears that insanity attacks women more often than it does men, but that, on the other hand, men are more liable to the other three forms of misfortune than are women. The negro population is much more liable to idiocy than to insanity. Both the negro and the foreign population are singularly more liable to blindness than to deafness. The tendency to insanity among the foreign population is especially worthy of attention. It may be accounted for in many ways: for instance, by the change of climate and of habits of life, by the increased anxiety and effort to advance in the scale of social respectability, by homesickness, and in general by the removal of the props which sustain and steady a man who does not emigrate, but remains in the vicinity where he was born. The same increased tendency to insanity may be discovered (but in a less marked degree) in Americans who remove from one section of the country to another, especially from the Atlantic to the Pacific coast."

The total number of paupers enumerated in almshouses is 67,067, as follows: Male, 35,952; female, 31,115; native, 44,106; foreign, 22,961; white, 61,310; colored, 5,757, including 18 Chinese and 33 Indians. The special agent remarks that "to these may be added, if any one is so disposed, 21,508 out-door paupers reported to the Census-Office, but no reliance whatever can be placed upon this figure. It is very far below the actual number, as will be apparent when it is stated, by way of illustration, that only thirteen out-door poor are returned from the city of Boston."

The number of prisoners in confinement in the United States, June 1, 1880, was 59,255. This total does not include 11,340 inmates of juvenile reformatories. Of the 59,255, 54,186 were males and 5,069 females, 46,338 native and 12,917 foreign, 42,294 white and 16,961

\* Including 105 Chinese, 53 Indians, 1 Japanese, and 2 East Indians.

† Including 5 Chinese and 84 Indians.

‡ Including 22 Chinese and 244 Indians.

§ Including 8 Chinese and 37 Indians.



colored. Among the colored are included 531 Chinese, one Japanese, and 161 Indians.

**MORTALITY STATISTICS.**—The total number of deaths recorded and tabulated, as occurring in the United States during the census year of 1880 is 756,893, being a death-rate of 15.1 to the 1,000. This death-rate is decidedly higher than that given in the census of 1860, namely 12.5, and of 1870, namely 12.8 per thousand. "But this," says Surgeon John S. Billings, of the United States Army, under whose direction the census mortality statistics of 1880 were compiled, "does not indicate any actual increase in the number of deaths as compared with the living population. It shows, rather, that the efforts made in the census of 1880 to obtain more complete returns of deaths than had been collected in previous enumerations have been to some extent successful."

After adding to the number of deaths returned by the census enumerators 61,020 deaths reported by physicians throughout the country, and making a computation showing an average mortality for the United States of 18.2 per thousand of living population per annum, Dr. Billings says:

The actual mortality for the whole country during the census year was not less than 17 nor greater than 19 per thousand. This rate compares favorably with that of all other civilized countries. The death-rate in the rural population of England, comprising ten and a half million people, in the year 1880, was 18.5 per thousand. For the whole of England, for the same year, it was 20.5 per thousand. For Scotland, in 1878, it was 21.3 per thousand; in the mainland rural group of Scotland for the same period it was 17.3 per thousand. The low death-rate in this country is considered to be due to the comparative absence of overcrowding, and to the more general and equitable distribution of the means of supporting life, including especially the abundant food-supply of good quality for all classes of people.

In a population of 43,402,970 whites, there are recorded 640,191 deaths, giving a death-rate of 14.74 per thousand. In a population of 6,752,813 colored, there are recorded 116,702 deaths, showing a death-rate of 17.28 per thousand. Of the total number of deaths reported, 391,960 were of males and 364,933 were of females, the total living population being 25,518,820 males and 24,636,963 females. For every thousand deaths of females there were 1,074 of males. These figures give a male death-rate of 15.35 per thousand and a female death-rate of 14.81 per thousand. It should be borne in mind, however, that the proportion of female to male deaths is somewhat greater than these figures would indicate.

Of the 390,644 deaths of males in which the ages are recorded, 96,894 occurred under one year of age and 163,880 under five years of age. Of the 363,874 deaths of females of which the ages are recorded, 78,372 were under one year of age and 138,926 under five years of age. The proportion of deaths of males under one year of age to all deaths recorded was 248.03 per thousand; of those under five years of age, 419.51 per thousand. The proportion

of deaths of females under one year of age to those of all ages recorded was 215.38 per thousand; of those under five years of age, 881.85 per thousand. The proportion to all deaths of which the ages are recorded of deaths of persons from five to fifteen years of age was 87.57 per thousand; from fifteen to sixty years of age, 299.66 per thousand; and over sixty years of age, 172.40 per thousand.

Of the total number of deaths, the causes of death were either not reported at all, or were so reported as to be necessarily classed as unknown in 23,053 cases, leaving a total of 733,840 cases of death in which the causes are distinguished. It is believed that the causes of death have been obtained much more accurately than in any preceding census, owing to the very general aid and co-operation of the physicians of the country in revising and correcting the enumerators' returns with reference to this point. The number of cases of deaths reported as due to diphtheria is: Males, 18,849; females, 19,549; total, 38,398; giving a proportion of 52.32 per thousand of all deaths in which the causes are reported. The total number of deaths from diphtheria under one year of age was 2,896; under five years of age, 20,035; between five and fifteen years of age, 16,162. The total number of deaths from enteric (typhoid) fever reported is: Males, 11,852; females, 11,053; total, 22,905; being in the proportion of 31.21 per thousand of all deaths having reported causes. The total number of deaths from this disease under one year of age was 654; under five years, 2,707; from five to fifteen years, 3,952; from fifteen to sixty years, 13,945; over sixty years of age, 2,248. Neither diphtheria nor enteric fever are especially diseases of the large cities. They appear to be more prevalent in the small towns and rural districts which have no general water-supply or systems of sewerage, but obtain their water from springs and wells and observe the usual custom of storing excreta in cesspools or vaults.

The total number of deaths reported as due to malarial fevers is: Males, 10,276; females, 9,985; total, 20,261; giving a proportion of 27.61 per thousand of all deaths from reported causes. The total number of deaths from these fevers under one year of age was 2,002; under five years, 6,182; from five to fifteen years, 3,482; from fifteen to sixty years, 7,909; sixty years and over, 2,623.

Consumption is the cause of death to which the greatest number of cases are referred in the records, there being reported 40,619 males and 50,932 females as dying of this disease, giving a proportion of 124.75 per thousand of all deaths having reported causes, or a little over 12 per cent.

In the north Atlantic and lake regions the mortality from consumption is highest in the small towns and rural districts, while on the Gulf coast the mortality is greatest in the city of New Orleans, in which it is higher than in

the Northern cities. This is probably due to the fact that New Orleans is not sewered or drained as are the Northern cities, and has the soil-water very near the surface.

The total number of deaths reported as due to accidents and injuries is 35,932, divided as follows: Burns and scalds, 4,786; drowned, 4,320; exposure and neglect, 1,299; gunshot-wounds, 2,289; homicide, 1,386; infanticide, 40; injuries by machinery, 120; railroad accidents, 2,349; suffocation, 2,339; suicide by shooting, 472; suicide by drowning, 155; suicide by poison, 340; other suicides, 1,550; sunstroke, 557; other accidents and injuries, 13,980.

The act of Congress of August 7, 1882, authorizes the publication of additional copies of the reports of the tenth census as follows: Complete set, 10,000; report on population, 20,000; agricultural, 20,000; manufactures and mechanics, 10,000; compendium, 100,000. Provision is made for distribution by the Secretary of the Interior to libraries, public institutions, and persons named by Senators and Representatives in Congress. The same act orders the publication of 6,000 copies of the report on the history of the national loan for the use of the Treasury Department, and 1,500 copies of the report on fish and fisheries, for the use of the Fish Commission. The entire returns of the census are estimated to make about 20,000 quarto pages. It is expected that about fifteen volumes, containing an aggregate of about 15,000 pages, will be published. The compendium, containing 1,800 octavo pages, was issued early in 1883.

**UNIVERSALISTS.** The statistics reported by the several State Conventions to the General Convention in October, 1882, show that the Universalist churches in the United States and the Province of Ontario are represented by a total of 778 parishes and 33,823 families.

The *Universalist General Convention* met in Philadelphia, Pa., in October. Mr. J. D. W. Joy, of Massachusetts, presided. The trustees of the convention reported that the receipts during the year from all sources amounted to \$15,810. The total proceeds of the missionary boxes had been \$1,888, of which \$908 had been

applied by the State Conventions, and \$980 were included in the receipts returned by the trustees. The annual contributions amounted to \$3,424. The Murray centenary fund amounted to \$124,018. The scholarship fund had increased from \$10,840 to \$15,101, the increment having arisen chiefly from the repayment of loans. A committee of nine persons, appointed by the previous General Convention to consider whether any change ought to be made in the Winchester profession of faith, reported that it had decided, at a meeting held in New York in February, that it was expedient to make some change in the second article of that document, and each member of the committee was requested to make a draft of the profession as he would like it to be. At a second meeting, held in Philadelphia, it appeared that four of the five members of the committee were in substantial agreement on the subject; but, as the committee had not had time to give as close a scrutiny to the matter as it required, it was decided to ask the convention for more time to complete the work. The committee was continued for another year. On the subject of missions the Board of Trustees reported, suggesting that if the means at its disposal were to be increased, one or more financial agents should be appointed. If it had \$30,000 a year, it could make a beginning. The gifts of the last year for missionary work, including all that had been raised for church purposes outside of the parishes, and excluding the income of the funds and \$100,000 raised for parish debts and \$100,000 for schools and colleges, were estimated to have amounted to \$45,000; but more than \$18,000 of this had been raised for the church in Washington. The time had come, the report continued, for the Church to look toward the establishment of missions in heathen lands. Its present means, of course, would not permit such an enterprise, but some of its people were already desirous of making contributions toward that end; and such contributions, it was believed, judging from the history of other churches, would promote and stimulate the home work. Much benefit had already been received from the encouragement of State missionary work.

## V

**VENEZUELA.** (See "Annual Cyclopædia" for 1881.)

**VERMONT. STATE GOVERNMENT.**—The State officers at the beginning of the year were as follows: Governor, Roswell Farnham; Lieutenant-Governor, John L. Barstow; Secretary of State, George Nichols; Treasurer, John A. Page; Auditor, E. Henry Powell; Superintendent of Education, Justus Darrt; Railroad Commissioner, Wayne Bailey. Judiciary, Supreme Court: Chief-Judge, Homer E. Royce; Assistant-Judges, Timothy P. Redfield, Jonathan Ross, H. Henry Powers, Wheelock G. Veazey, Russell S. Taft, and John W. Rowell. Changes during the year are noticed below.

**LEGISLATURE.**—The Legislature met in biennial session on the 4th of October, and adjourned on the 28th of November. On the 5th of October the inauguration took place, and the messages of the outgoing and incoming Governors were received. On the 7th of November, in joint session, the following officers were re-elected: George Nichols, Secretary of State; E. Henry Powell, Auditor of Accounts; Justus Darrt, Superintendent of Education. On the



8th, Homer E. Royce was re-elected Chief Judge of the Supreme Court, and the following were re-elected Assistant-Judges: T. P. Redfield, Jonathan Ross, H. Henry Powers, Wheelock G. Veazy, Russell S. Taft, and John W. Rowell. On the 28th, Wayne Bailey was re-elected Railroad Commissioner. One hundred and fourteen acts of a public character were passed.

The Hooker revenue bill is No. 1, followed by the act revising, consolidating, and amending the laws relating to the grand list. Act No. 3 reduces to \$1,500 the aggregate amount of savings-bank deposits which any resident of the State may have free from taxation on the grand list. The act provides forfeits and penalties for evasions or attempts to evade the provisions of this act. By No. 4 owners of fowls to the value of more than twenty dollars are subject to taxation on the excess. No. 6 provides for the taxation of the Vermont Central Railway when any person or corporation other than the original company, in any character or right, is operating that road. No. 12 establishes the outer bound of puppyhood at eight weeks, and fixes the license-fee for every male dog at one dollar and for every female at four dollars. No. 13 contains the amendments to the Judevine highway law—amendments which practically destroy the one feature of that measure which made it possible for it to become a law two years before. The cumbersome and practically prohibitory machinery of the law relating to complaints for insufficiencies is retained; but the section which limited the liability of towns to damages received on bridges exceeding eight feet span is amended to include all bridges, culverts, and sluice-ways. No. 18 gives tax-payers who work out their taxes fifteen cents an hour for their labor. No. 19 makes the text-books of schools recommended by the text-book committee of 1879 the authorized books till November 1, 1889, and the use of any other books except for reference is unlawful. No. 22 allows teachers while their schools are in session to attend teachers' institutes or educational meetings held pursuant to law, for a period not exceeding three days without losing their time. No. 35 has reference to the organization of the Vermont Central Railway Company, and is intended to facilitate the same. Nos. 36 to 40 relate to railway matters of general interest; 41 to 46, to the liquor-traffic; and 47 to 49, to the care and custody of the insane. Owners or keepers of public billiard or pool tables or bowling-alleys will need to read and heed No. 53. The penalty for allowing any minor to play these games, in opposition to the written request of parent, guardian, or school principal, is not less than ten dollars. No. 54 forbids posting bills or painting placards or notices on bridges, trees, etc., without the consent in writing of the selectmen of the town. Individuals who indulge in smashing street-lamps, or lamps in the grounds about

public buildings, are liable under No. 55 to a fine of not more than fifty dollars, or three months' imprisonment. No. 70 provides for suits by and against associations and joint-stock companies, and obliges such organizations doing business in the State to designate some person in every county in which they are doing business, upon whom legal process may be served. If such designation is not made, legal process may be served upon any "conductor," "messenger," "express agent," "operator," "manager," or any person or employé of a company holding a position corresponding to the above. No. 79 imposes wise restrictions against the overcrowding of public halls and theatres. All passage-ways must be kept clear of chairs. No. 81 is aimed at "dead-beats" who try to defraud hotel-keepers of food and lodgings. No. 82 dooms the murderous toy-pistol. No. 83 makes an attempt to poison food, drink, medicine, or springs punishable with not more than twenty years in the State-Prison. The twenty-two constitutional amendments proposed by the Senate to the House two years before, and by that body reduced to six, were by their Legislature cut down to two: the first providing for an additional oath which will, if finally adopted by the people, keep postmasters and other United States officers out of the Legislature; the second making the officers of Auditor and Secretary of State elective by the people. The vote of the people on these amendments is to be taken on the 6th of March, 1883.

Act No. 1 contains the following important provisions:

SECTION 1. Funds for the payment of State expenses shall be raised by direct State taxes upon the corporate franchise or business in this State of railroad, insurance, guarantee, express, telegraph, telephone, steamboat, car, and transportation companies, savings-banks, savings institutions, and trust companies, as provided in this act, and shall be payable in money to the State Treasurer for the use of the State.

Sec. 2. The Governor, in the year 1882 and biennially thereafter, shall appoint, with the advice and consent of the Senate, a Commissioner of State Taxes. He shall report biennially to the General Assembly.

Sec. 11. Every corporation, person or persons owning or operating a railroad in this State—whether as owner, lessee, receiver, trustee, or otherwise—shall pay a tax to the State on the entire gross earnings of such railroad, if such railroad is situated wholly within the State. If such railroad is situated partly within and partly without the State, the tax shall be upon such proportion of the entire gross earnings of such railroad as the mileage of trains run in this State bears to the mileage of all the trains run on the entire main line of the road.

Sec. 12. The tax upon such earnings shall be rated according to the earnings per mile of road in this State, and is hereby assessed at the rate of two per cent on the first two thousand dollars a mile, or total earnings if less than that sum; at the rate of three per cent on the first thousand or part thereof above two thousand dollars a mile; at the rate of four per cent on the first thousand or part thereof above three thousand dollars a mile; and when the earnings exceed four thousand dollars a mile, at the rate of five per cent on all earnings above that sum.

Sec. 14. When a railroad is operated in this State by a corporation, person, or persons, by virtue of a lease or other contract, the aforesaid tax shall be paid

by the lessee of such railroad, or holder of such contract, as the case may be; and the said tax shall be charged against and deducted from any payments due or to become due the lessor of such railroad, or person, persons, or corporation granting such contract, as the case may be, on account of such lease or contract, unless in the provisions of such lease or contract it is stipulated otherwise.

Sec. 15. Every home or foreign insurance company, or association doing insurance business in this State, or guarantee company doing business in this State, shall pay a tax to the State, which is hereby assessed, at the rate of two per cent per annum, on the gross amount of premiums and assessments collected in their business in this State.

Sec. 16. Every life-insurance company incorporated by this State shall, in addition to the tax assessed by the preceding section, pay a tax to the State, which is hereby assessed, at the rate of one half of one per cent annually, on all surplus over and above the necessary reserve, computed at four per cent on all existing policies. The value of the real estate owned by such insurance companies shall be deducted from the surplus.

Sec. 17. In determining the amount of tax to be assessed under the provisions of section 15, there shall be deducted from the full amount of premiums and assessments, unused balances on notes taken for premiums on open policies, all sums paid for return premiums on canceled policies, dividends to policy-holders, and sums actually paid to other insurance companies incorporated under the laws of the State, or to the agents within this State of foreign companies for reinsurance on risks, for which a tax on the premium would be due had no re-insurance been effected: *Provided*, That nothing in this section shall be so construed as to allow dividends in scrip, or otherwise in stock, mutual or mixed companies, to be considered return premiums.

Sec. 18. Every savings-bank and savings institution incorporated by this State, and doing business herein, shall pay a tax to the State, which is hereby assessed, at the rate of one half of one per cent annually, upon the average amount of its deposits and accumulations, deducting therefrom the average amount of its assets invested in real estate owned by such corporation, and also the amount, if any, of individual deposits in excess of fifteen hundred dollars each, listed to depositors in towns in this State where such depositors reside.

Sec. 19. Every trust company and "savings-bank and trust company" incorporated by this State, and doing business herein, shall pay a tax to the State, which is hereby assessed, at the rate of one per cent annually upon the average amount of its deposits, including money or securities received as trustee under order of court or otherwise, deducting therefrom such percentage as such institution pays to the United States Government so long as such tax is paid, and also the average amount of its assets invested in real estate owned by such corporation, and also amount, if any, of individual deposits in excess of fifteen hundred dollars each, listed to depositors in towns in this State where such depositors reside.

Sec. 20. No other tax shall be assessed on such deposits or accumulations in case of savings-banks, or on such deposits in case of trust companies and "savings-banks and trust companies," or against the depositors on account thereof, except individual deposits exceeding in the aggregate fifteen hundred dollars.

Sec. 21. Every corporation, joint-stock company, person or persons doing express business in this State shall pay a tax to the State which is hereby assessed at the rate of three per cent annually on the gross receipts of their business transacted in this State.

Sec. 22. Every corporation, joint-stock company, person or persons doing telegraph business in this State shall pay a tax to the State which is hereby assessed at the rate of three per cent annually on the gross receipts of their business transacted in this State.

Sec. 23. Every corporation, joint-stock company, person or persons doing telephone business in this State, shall pay a tax to the State which is hereby assessed at the rate of three per cent annually on the gross receipts of all their business in this State, including sums received for rental of instruments. But there shall be deducted from such gross receipts the amount paid by such corporation, company, or persons to any telegraph company with whom they are connected.

Sec. 25. Every steamboat, car, or transportation company incorporated under the laws of this State shall pay a tax to the State, which is hereby assessed, at the rate of two per cent annually on the gross receipts of all their business.

Sec. 26. The Commissioner of State Taxes may examine upon oath any officer, agent, or clerk of a corporation or persons operating a railroad or doing express, telegraph, or telephone business in this State, or of an insurance company doing business in this State, or of a savings-bank, savings institution, or trust company incorporated by this State, and doing business herein, or of a steamboat, car, or transportation company incorporated under the laws of this State, and may examine any book of accounts kept by such corporation, company, or persons, concerning all matters as to which information is required to carry out the purposes of this act.

Sec. 29. Real and personal estate used in operating a railroad, or used in carrying on express, telegraph, or telephone business in this State, and real and personal estate owned by steamboat, car, and transportation companies taxed by this act, also stock in steamboat, car, and transportation companies, which companies are taxed by this act, shall not hereafter be set in the grand list, and shall not be required to be stated in the inventories required to be returned to listers by section 324 of the revised laws. And listers in making annual grand lists hereafter shall omit from the last quadrennial appraisal all real estate mentioned in this section. But this act shall not be construed to take out of the grand lists of 1882, or of any previous year, any property included in such lists, or to diminish the liability of any person to the payment of taxes assessed or to be assessed on such lists.

Sec. 48. So much of the charter of a corporation or company organized under the laws of this State as exempts such corporation or company from taxation, so far as it conflicts with this act, is hereby repealed.

A bill abolishing the district-school system, and establishing a town system, failed to pass.

FINANCES.—The following is an abstract of the report of the Auditor for the sixth biennial term, covering the transactions for the two fiscal years ending July 31, 1882: The orders drawn at the Auditor's office for the year ending July 31, 1881, amount to the sum of \$277,585.24, and to \$280,619.38 for the year ending July 31, 1882. The orders drawn at the offices of the county clerks to settle the accounts of county clerks, sheriffs, jailers, justices of the peace and judges of municipal courts, amount for the year ending July 31, 1881, to the sum of \$43,714.88, and to \$39,968.29 for the year ending July 31, 1882.

Auditor Powell says that the change in the method of accounting for fines and costs by requiring from each justice a sworn statement of all business done and the disposition of each case, before the allowance of bills, with other legislative acts of the last session, has wrought a great saving to the State.

The comparative table given below shows the fines and costs collected biennially for the



past three terms by the various justice and municipal courts:

TERMS.	Court orders.	Net court expenses.	Fines and costs collected.
Term ending 1878...	\$165,922 73	\$223,886 89	\$25,588 76
Term ending 1880...	185,379 97	176,565 84	45,007 18
Term ending 1882...	83,683 17	93,728 76	66,576 47

This table shows the fines and costs collected in each year, for the last two years, to be about \$17,000 more than for years preceding.

Probate returns for the last two years show a net excess of probate fees of \$109, against a net deficit of \$1,200 in former terms.

The orders drawn by the Auditor for the year ending July 31, 1882, contain the following items:

Court expenses.....	\$39,350 07
State printing, stationery, etc.....	6,640 87
House of Correction expenses.....	9,425 76
Reform-School expenses.....	21,508 63
State-Prison expenses.....	49,598 64
Salaries of seven Supreme Court Judges.....	17,478 94
Salaries of Probate Judges.....	11,750 00
Salaries of State Attorneys.....	5,900 00
Salary of Governor.....	1,200 00
Salary of Treasurer.....	1,700 00
Salary of Secretary of State.....	2,200 00
Salary of Auditor.....	1,400 00
State militia expenses.....	18,176 72
Department of Agriculture expenses.....	2,586 92
Vermont Insane Asylum.....	37,198 78

The figures of the second appraisal of the real and personal estate, under the act to equalize taxation, passed in 1880, proves the measure to be an unqualified success in its general results. The total valuation for 1882 of the taxable property and polls in the State is as follows:

Amount of real estate.....	\$106,577,559
Amount of personal estate.....	46,996,584

Total valuation.....\$153,573,584

One per cent of this valuation is taken as a basis for assessing taxes, and which, reduced, makes a grand list of \$1,535,735.84. To this add 73,757 polls at \$2, less deductions, and we have a list aggregating \$1,680,529.84. For 1881 the figures were as follow:

Amount of real estate.....	\$102,437,102 00
Amount of personal estate.....	46,896,967 00

Total.....	\$149,334,069 00
One per cent of which is.....	1,493,340 69
Add polls, 73,643, at \$2 each.....	\$147,296
Less deductions.....	8,016—
	144,280 00

Grand list.....\$1,687,620 69

A comparison of the grand lists for 1881 and 1882 shows the increase of the real-estate valuation of the latter year over the previous year to be \$4,140,457. On personal property the increased valuation is some \$100,000.

The following table shows the changes in the State grand list:

	1878.	1879.	1880.
Real estate.....	\$92,563,432	\$71,017,961	\$71,114,747
Personal property...	16,845,128	15,375,538	15,037,262
Total.....	\$109,418,555	\$86,393,514	\$86,152,009

The direct taxes levied and collected for the last two years were \$479,097.

The report of the Inspector of Finance shows the condition of the savings-banks and trust companies in the State, on the 30th day of June, 1882.

The whole number of depositors in these financial institutions at the date of the report was 42,583, an increase during the year of 4,204.

The deposits aggregated \$12,675,269.71, an increase of \$2,015,784.59 since the report of 1881. Of the deposits \$10,221,178.52 belongs to depositors living in Vermont, and \$2,454,091.19 to non-residents. The average amount to the credit of each depositor is \$297.66. There are 27,996 depositors having less than \$250 on deposit. Three hundred and seventy-three depositors have over \$2,000 each to their credit. The Inspector recommends that the Legislature reduce the amount allowed to the credit of any one individual depositor, to draw interest, to \$1,500. The interest credited to depositors' accounts during the year (including dividends to stockholders of trust companies), amounts to \$382,821.05, an increase of \$30,849.71 over the previous year. The present undivided earnings, interest, and surplus held by all these banks amount to \$439,624.21, an increase of \$105,695.41. There has been an increase in the amount loaned on mortgage security of \$118,197.93.

The number of savings-banks and trust companies in the State is 22; the total expenses of these institutions for the year was \$112,876.75; the amount of United States taxes paid on deposits was \$14,056.28; the amount of State tax was \$53,681.12.

Omitting all payments on account of loans, savings-bank tax, United States deposit, soldiers' and trust funds, that are not taken into account as a part of the current expenses of the State, the disbursements for the

Two years ending August 1, 1882, were.....	\$719,171
Two years ending August 1, 1880, were.....	778,911
Two years ending August 1, 1878, were.....	844,572
Two years ending August 1, 1876, were.....	810,857
Two years ending August 1, 1874, were.....	697,688
Two years ending August 1, 1862 (omitting all war expenses, also), were.....	864,772

The Auditor estimates that \$70,000 of the expenses of 1881 and 1882 were exceptional. Admitting this, and deducting but \$16,000 as exceptional from expenses of 1861 and 1862, during which time one extra and two regular sessions were held, we find the annual current expenses \$150,000 greater than twenty years since, and they were much larger at that time than they should have been.

The financial condition of the State, as shown by the Treasurer's report, is as follows:

LIABILITIES.	
Due towns, United States surplus fund.....	\$18,397 62
Due soldiers' account.....	8,959 02
Due suspense account (outstanding checks)....	1,940 24
Due bonds and coupons due 1876.....	4,860 00
Due towns on account of savings-bank tax.....	42,760 86
Due Agricultural College fund due 1890.....	185,500 00
Due orders not presented.....	2,666 55
Total.....	\$209,588 79

## ASSETS.

Cash and deposits.....	\$126,118 60
Uncollected taxes.....	218 94
Due from savings-banks.....	23,167 63
Total.....	\$154,505 23

The only items in the list of liabilities that are likely to be called for are suspense, savings-bank tax, and orders not presented, amounting to \$47,367.15, leaving an excess of available assets over current liabilities August 1, 1882, of \$107,138; on the same basis, August 1, 1878, \$153,009; on the same basis, August 1, 1880, \$199,483.

The following table shows the total acreage and average valuation per acre of the farms (exceeding ten acres) in each county, the appraised valuation thereof as equalized by the State Board, and the aggregate valuation of all real estate for purposes of taxation (except road-beds of railways) for the year 1882:

COUNTIES.	Acreage of farms over ten acres.	Average value per acre.	Total appraised value.	Total real-estate value.
Addison .....	428,384	\$16 25	\$6,964,011	\$8,572,323
Bennington.....	375,951	9 38	3,509,642	5,509,961
Caledonia.....	342,858	13 81	4,735,773	7,174,606
Chittenden.....	297,592	20 42	5,825,455	11,226,471
Essex.....	254,835	5 00	1,274,621	1,713,905
Franklin.....	347,477	15 87	5,515,333	7,976,071
Grand Isle.....	48,163	22 79	1,097,555	1,201,272
Lamoille.....	243,374	11 61	2,826,464	3,280,390
Orange.....	389,072	13 73	5,363,078	6,979,389
Orleans.....	309,616	11 72	4,034,743	5,879,162
Rutland.....	524,314	14 33	7,777,936	15,562,026
Washington.....	337,337	14 53	5,626,733	8,747,752
Windham.....	449,192	10 37	4,657,577	8,566,196
Windsor.....	549,376	13 72	6,920,421	10,318,340

Included in the last column is the appraised valuation of first-class real estate, comprising all buildings and property in estates under ten acres.

The footings of the above tabulated statement are as follows: Number of acres in farms exceeding ten acres in the State, 5,037,841; average appraisal per acre for the State, \$18.86; total appraised valuation of such farms in Vermont, \$46,779,445; total appraisal of first and second class real estate in Vermont, \$102,708,419.

To this should be added the following appraised valuation of road-beds of the various railways as reported by the State Board of Listers and arranged by counties: Addison County, \$130,647; Bennington, \$182,309.87; Caledonia, \$82,400; Chittenden, \$122,976.04; Essex, \$81,225; Franklin, \$200,707.74; Grand Isle, \$32,842; Orange, \$165,916; Orleans, \$173,447.50; Rutland, \$309,296; Washington, \$78,190; Windham, \$176,736; Windsor, \$237,828; total, \$1,974,521.15.

A summary of the valuation of the first, second, and third class of real estate in the State, as determined by the State Equalizing Convention (and returned by the State Board of Listers), aggregates \$104,682,940.

PUBLIC INSTITUTIONS.—In 1880 there were

142 convicts in the State-Prison; in 1882 the number was 94.

On the 31st of July, 1880, there were 66 prisoners in the House of Correction and four in the Rutland County Jail, which is in the same building and under the same management. Two years later there were 44 prisoners in the House of Correction and one in the Rutland County Jail, making a difference of 25 in the two years.

On July 31, 1880, there were 122 pupils in the Reform School; on the same day in 1882 there were but 86, a decrease of 36 in two years.

The report of the trustees of the Insane Asylum at Brattleboro shows that the number of the inmates of the asylum August 1, 1882, was 441, of whom 356 were residents of Vermont, an increase of 27 within two years. They say that the institution has become almost exclusively devoted to the State, only three having been admitted from outside its limits in the past two years.

There are in the various institutions at which the beneficiaries of this State are being educated the following numbers, viz.: At the American Asylum for the Deaf and Dumb at Hartford, Conn., 17; at the Clarke Institution for Deaf-Mutes at Northampton, Mass., 4; at the Perkins Institute for the Blind at Boston, Mass., 8; at the Massachusetts School for Idiotic and Feeble-Minded Youth at South Boston, Mass., 3. To aid in supporting these pupils the State has expended during the past two years the following sums, viz.: For the deaf and dumb at the American Asylum, \$5,689.66; for the deaf and dumb at the Clarke Institute, \$1,430.71; for the blind at the Perkins Institute, \$4,850; for the feeble-minded at South Boston, \$2,316.96. The entire appropriation per annum is \$5,000 for the deaf and dumb, \$4,000 for the blind, and \$2,000 for the feeble-minded.

EDUCATION.—The Superintendent of Education, in his report embracing the two years ending March 31, 1882, says that as a whole the common schools are not now accomplishing what the best interests of the people and State demand. Among the many causes for this inefficiency he cites the following: That the number of native-born children has decreased; that the people have gradually gathered around business centers, and that many rural districts are thinly populated; that schools are small, scholars young, real estate depreciated, taxes high, and the tendency of the times is to employ cheap teachers; that school-houses are neglected, and that the work of the district schools is unsatisfactory.

In 1857 there were but four graded schools and seventy academies in the State. Since then the academies have decreased and graded schools increased.

The State Normal School at Castleton reports an aggregate attendance for the year of 396 pupils and 13 graduates; and the Normal



School at Johnson 122 different students, and the aggregate number of graduates since 1867 to be 262. The Randolph Normal School had 187 scholars at the spring term of 1882, and graduated a class of 20 at that term.

The following statistics, taken from the superintendent's report, are interesting:

Number of school districts.....	2,383
Number of common schools.....	2,527
Number of children attending common schools..	74,000
Average daily attendance.....	47,772
Amount of money divided to districts.....	\$119,670 06
Amount of money raised by tax.....	871,851 84
Amount of teachers' wages, including board.....	881,607 83
Amount of all school expenditures.....	476,478 08
Number of male teachers.....	653
Number of female teachers.....	3,723

**THE HUNTINGTON WILL.**—This bequest has already been accepted by the State, and that fact communicated to the court before whom the case was tried.

**POLITICAL.**—The Republican State Convention met in Montpelier on the 21st of June, and nominated the following ticket: For Governor, John L. Barstow, of Shelburne; for Lieutenant-Governor, Samuel E. Pingree, of Hartford; for Treasurer, William H. DuBois, of Randolph. The following are among the resolutions adopted:

*Resolved*, That we deprecate the one-term practice which generally prevails in the election of members of the Legislature, believing that it seriously impairs the efficiency of the legislative branch of the State government; that with a view to the correcting of the evils which result from this practice we earnestly recommend the voters of the State to choose for the offices of Representative and Senator "the persons most noted for wisdom and virtue," and by successive elections retain them in the legislative service so long as they may be compatible with the public good.

*Resolved*, That we recognize the paramount importance of popular education as an element in the highest development of the State, and favor such additional legislation as the condition and wants of the common schools of the State may demand.

*Resolved*, That recognizing the vast importance of our agricultural interests, we believe that they should receive such attention at the hands of our legislators as will give to our State such a thorough, practical, and generous system as shall by its steady and wise application most successfully develop the material prosperity of our Commonwealth.

The Republican candidates for Congress were: John W. Stewart, in the First District, and Luke P. Poland, in the Second. The Democrats nominated George E. Eaton for Governor, G. N. Bullard for Lieutenant-Governor, Willard Gay for Treasurer, and L. W. Redington and George L. Fletcher for Congress. William W. Grout ran as Independent Republican in the Second District. The Greenbackers also made nominations. At the election in September the Republican ticket was chosen, the vote being as follows:

FOR GOVERNOR.	
Whole number of votes cast.....	51,845
Necessary for a choice.....	25,925
John L. Barstow had.....	35,839
George E. Eaton had.....	14,466
Carlos C. Martin had.....	1,535
Scattering.....	8
Majority for John L. Barstow.....	19,580

#### FOR LIEUTENANT-GOVERNOR.

Whole number of votes cast.....	51,834
Necessary for a choice.....	25,918
Samuel E. Pingree had.....	35,856
E. N. Bullard had.....	14,442
John G. Jenne had.....	1,534
Scattering.....	2
Majority for Samuel E. Pingree.....	19,578

#### FOR TREASURER.

Whole number of votes cast.....	51,516
Necessary for a choice.....	25,909
William H. DuBois had.....	35,854
Willard Gay had.....	14,402
Fletcher Tarble had.....	1,561
Scattering.....	9
Majority for William H. DuBois.....	19,892

#### FIRST CONGRESSIONAL DISTRICT.

Whole number of votes cast.....	22,575
Necessary for a choice.....	11,288
John W. Stewart had.....	15,688
L. W. Redington had.....	6,909
C. W. B. Kidder had.....	865
Scattering.....	63
Majority for John W. Stewart.....	8,701

#### SECOND CONGRESSIONAL DISTRICT.

Whole number of votes cast.....	24,756
Necessary for a choice.....	12,394
Luke P. Poland had.....	12,795
George L. Fletcher had.....	6,863
H. D. Dunbar had.....	890
William W. Grout had.....	4,553
William P. Dillingham had.....	888
Scattering.....	817
Majority for Luke P. Poland.....	804

The new districts consist of the following counties: First—Addison, Bennington, Chittenden, Franklin, Grand Isle, Lamoille, and Rutland; Second—Caledonia, Essex, Orleans, Orange, Washington, Windsor, and Windham.

The Legislature chosen at this election consists of twenty-eight Republicans and two Democrats in the Senate, and one hundred and eighty-three Republicans, fifty Democrats, one Independent, and two Greenbackers in the House.

On the 7th day of January, John Pierpont, Chief-Justice of the Supreme Court of the State, died at his residence at Vergennes. On the 10th of the same month the Governor appointed Homer E. Royce, who was then First Assistant Judge of the Supreme Court, Chief-Justice, to fill the vacancy occasioned by the death of Judge Pierpont. He then reappointed all of the other Assistant-Judges, advancing each one of them one step, and, to fill the vacancy thus occasioned, appointed John W. Rowell, of Randolph, Sixth Assistant-Judge of the Supreme Court.

**VIRGINIA. STATE GOVERNMENT.**—The following are the State officers: Governor, William E. Cameron, Readjuster; Lieutenant-Governor, John F. Lewis; Secretary of State, William C. Elam; Treasurer, David R. Revelley; Auditor, S. Brown Allen; Second Auditor, Henry H. Dyson; Attorney-General, Frank S. Blair; Superintendent of Public Instruction, Richard R. Farr; Adjutant-General, James McDonald; Commissioner of Agriculture, James M. Blanton; Superintendent of Land-Office, J. W. Brockenborough; Railroad Commissioner, George A. Martin; Judiciary, Court of Appeals: Chief-Justice, Robert A. Richardson;

Judges, T. T. Fauntleroy, Lunsford L. Lewis, Benjamin W. Lacy, and Drury A. Hinton.

LEGISLATURE.—The Legislature, which was in regular session at the beginning of the year, adjourned on the 6th of March. It was convened by the Governor in extra session on the following day, and continued in session until the 22d of April. Among the acts passed are the following:

Amending the law in relation to the correction of erroneous assessments of lands and lots. For the assessment of taxes on persons, property, income, and licenses, and imposing taxes thereon for the support of the government and free schools, and to pay the interest on the public debt. To amend the law in relation to carrying concealed weapons (omits the word "habitually"). To secure to tax-payers in cities and towns the right of public-school education for their children. Prescribing the penalty for non-payment of taxes in cities and towns. To prevent the catching of oysters at night or on Sunday. To authorize the stockholders of the Richmond and West Point Terminal Railway and Warehouse Company to change its name to the Richmond, Danville and Southern Railway Company. To suppress dueling in the Commonwealth of Virginia. To repeal all acts and parts of acts relating to punishment by stripes, and to substitute other forms of punishment therefor. Giving the consent of the State of Virginia for the purchase by the United States of a tract of land at Yorktown for the purpose of the erection thereon by the United States of a monument to commemorate the surrender of Lord Cornwallis and his forces to the allied army commanded by General George Washington in October, 1781. To return to the public free schools a portion of the moneys diverted therefrom. To amend certain sections of an act in relation to the deposit of foreign insurance companies. Giving the consent of this State to the purchase by the United States of two parcels of land in the county of Westmoreland for the purpose of erecting and maintaining a monument to mark the site of the birthplace of George Washington, ceding jurisdiction over the same, and exempting the same from taxation. Directing the Governor to convey to the United States the title of the Commonwealth to certain real estate in Westmoreland County, and ceding jurisdiction over the same to the United States, and exempting the same from taxation. To authorize the Richmond and Danville Railroad Company to discharge its indebtedness to the State.

Among the bills bearing on the public debt passed at this session, was one to which the reporters gave the name of "Coupon-Killer No. 1." It was intended to restrict the receivability of coupons for taxes, and under the plea of protecting the State against spurious and counterfeit coupons required that no coupon should be received by a collecting officer until it had first been tested by court and jury by a

process so expensive, as alleged, as to practically annihilate the receivability feature of said coupons. Subsequently there was an act passed forbidding the writ of *mandamus* in any revenue cases.

Another act was passed supplementary to the preceding, and called "Coupon-Killer No. 2." (For the provisions of the acts, and the decision of the Supreme Court of the United States on their constitutionality, see OBLIGATION OF CONTRACTS.)

Perhaps the most important act of the session was the so-called "Riddleberger bill" or "debt bill," entitled "An act to ascertain and declare Virginia's equitable share of the debt created before and existing at the time of the partition of her territory and resources, and to provide for the issuance of bonds covering the same, and the regular and prompt payment of interest thereon."

The following is the *Readjuster theory* of the bill:

The preamble presents "the true state of the account between the State and her creditors," derived from the Second Auditor's office, and fixes the debt, principal and interest, June 20, 1863—the date at which West Virginia was admitted into the Union—at \$39,095,928.99, of which two thirds (one third being assigned to West Virginia) is \$26,063,952.66, subject to a credit of \$3,662,434.55 of interest paid from January 1, 1861, to July 1, 1863, *exclusively* out of the revenues of this State, and leaving a principal debt of \$22,094,141.96, with interest due to the sum of \$907,376.17—total debt of this Virginia, July 1, 1863, \$22,401,518.03.

Following up the account upon this basis, and giving this State due credit for her redemptions and payments, the statement ascertains the true debt, as of July 1, 1882, at \$16,843,034.17 of principal and \$4,192,342.98 of interest—total, \$21,035,377.15—which includes the Literary Fund. This sum is apportioned to the various outstanding bonds upon the basis of equity—in which each class is treated according to what it has *heretofore received*. Thus, that class which has received most now gets the least, and that which has received the least now gets the most.

Under the scheme the different classes are fundable in the new bonds proposed to be issued, as follows: Consols at 53 per cent of their face, and the past-due and unpaid interest thereon at 100 per cent; 10-40's at 60 per cent, and the past-due and unpaid interest thereon at 100 per cent; peelers at 69 per cent, and the accrued interest thereon at 80 per cent; unfunded bonds at 69 per cent of two thirds of their face, with the unpaid interest thereon at 63; and the equitable share of the State of the bonds of the Literary Fund at 69 per cent, the interest in arrears on such share, \$379,270, to be paid in money.

For all balances of such indebtedness as may constitute the share of West Virginia certificates are to issue, without recourse on this State. The bonds are to issue of the date of July 1, 1882, payable on July 1, 1882, or after July 1, 1900, at the option of the State, and are to bear 3 per cent interest—principal and interest payable in Richmond at the Treasury. The coupons of the coupon-bonds are not tax-receivable, nor are they, or any of the bonds, exempt from taxation.

In 1890, and annually thereafter until all the bonds are paid, 24 per cent of the amount of the bonds outstanding shall be set apart from the revenue and paid into the Treasury to the credit of the Sinking Fund, and to be applied to the redemption or purchase of the bonds. Fiduciaries may exchange State bonds held by them for bonds issued under the act, when so



authorized by any court having jurisdiction. Interest is to be paid as it becomes due out of any money in the Treasury not otherwise appropriated.

The Legislature also adopted the proposed amendment to the Constitution abolishing the poll-tax as a prerequisite to voting, and provided for a popular vote upon it in November.

Much of the session was occupied with the election of judges and other officers, and with measures designed for the benefit of the Readjusters. They early met with opposition within their own ranks, which began with their refusal to re-elect Auditor John E. Massey, who had been one of their most prominent leaders. Four Readjuster Senators adhered to his fortunes, and after his displacement opposed and defeated the Readjuster schemes for congressional reapportionment, for redistricting the State for Circuit Judges, for the passage of election and registration laws, and other party measures.

**STATISTICS.**—The Board of Public Works fixed the tax on the railroads of the State for the year at \$138,454.92.

The Virginia Penitentiary has now within its walls and on public works 977 convicts, an increase of 29 during 1882. During the fiscal year there were received 330 criminals. During the same period 185 were discharged, 33 died, 73 were pardoned, and 19 escaped—1 from the Penitentiary and 18 from public works. The number of prisoners confined for life is 16. The number of prisoners confined for terms ranging from twenty to fifty-four years is 49. The youngest convict is eleven years of age, and the two oldest are seventy-six. Of the convicts, 276 are under twenty-one years of age.

The occupation and distribution of the convicts in the Penitentiary and on public works at the close of the fiscal year were as follow:

Shoemakers .....	400
Tobacco manufacturers.....	99
Coopers.....	44
Cooks, jobbers, specials, Capitol Square hands, laborers, in hospital, disabled, infirm old men, servers, and nurses.....	123
Males on public works:	
Valley Railroad.....	237
Bristol Coal and Iron Railroad.....	26
Danville and New River Railroad.....	23
Landresses.....	10
Seamstresses.....	10
Total .....	977

The average term of the sentences of the convicts is eight years seven months and six days, and their average age is twenty-seven years and twenty-nine days.

The manufacturing industries of Richmond comprise 710 establishments in operation, employing 15,813 hands, with invested capital amounting to \$11,213,680. The sales of the products of these aggregated in 1882 \$28,061,332. Large as these sales are, they fall short of 1881 by \$4,741,424. The loss is chiefly in tobacco, which drops off \$3,029,100, and there is a loss in other branches—of \$403,203 in iron, of \$434,725 in cigars and cigarettes, of \$350,-

000 in pork-packing, and of \$49,281 in flour. In other departments there has been steady growth in the number of operatives employed, capital invested, and in productions.

The following is a comparative statement of the exports of Richmond for the years 1881-1882:

EXPORTS.	1881.	1882.
Tobacco.....	\$79,604	\$259
Flour.....	1,651,084	949,027
Petroleum.....	17,900	39,315
Timber and lumber.....	54,904	44,683
Staves.....	15,212	53,027
Hoops.....	22,593	53,155
Lard.....	6,719	9,745
Coal (bituminous).....	.....	8,222
Wheat.....	65,456	17,256
Cotton goods.....	1,436	3,965
Cotton to England on steamers from West Point.....	.....	1,062,500
Logs.....	.....	574
Hams.....	.....	625
Sundries.....	775	487
Totals .....	\$1,914,813	\$2,237,445

Total number of barrels of flour shipped to Brazil from Richmond during 1882.....	142,237
Total value of same.....	\$949,027
Decrease in shipment of flour to Brazil as compared with 1881—number of barrels.....	81,259
Total number of vessels engaged in the flour-trade with Brazil.....	44
Being a decrease of.....	29

During the year two barks and six steamships cleared from West Point (port of Richmond), carrying an aggregate of 50,288 barrels of flour to Brazil.

**CROPS.**—The peanut-crop is an important one in many of the counties of Tidewater Virginia, south of James River, and is attended with considerable profit. Virginia raises more than any other State—the crop being worth at least \$500,000 (estimate of 1879)—then North Carolina, then Tennessee—these being the only States which raise them for market. Lime or marl is indispensable to the successful cultivation of this crop. The sweet-potato crop is another important one in Tidewater Virginia. The cultivation of this usually goes hand in hand with that of melons, the same kind of soil suiting each. Irish potatoes are not raised extensively in the State for market. They succeed admirably about the foot of the mountains and on the mountains, and do well in all the cooler sections of the State. In Tidewater Virginia they can be raised early for market, and are shipped considerably from the vicinity of Norfolk. There is one root-crop which has been neglected, and which it is thought would succeed well on all the light, good land in the State, viz., artichokes. They are very productive on light, loamy lands near the streams, but are productive on all rich land of almost any kind.

Grape-culture and wine-making have assumed encouraging proportions in Virginia, and are on the increase, particularly in Piedmont Virginia, in Albemarle, Nelson, Prince William, Warren (in the Valley), etc. A very considerable quantity of wine has been made by different parties of excellent quality, though the business is yet

in its infancy, only commenced a few years since, and in many instances not followed up with intelligence and energy.

Fruits are not generally profitable in the State, except apples in Piedmont and in the Valley.

Cotton is taking hold and extending itself farther north in the counties south of James River, in Tidewater. It is probable that the people of this section can make more money from this crop than from any other crop, if they will take care to avoid the error that many planters have committed, of not raising corn enough to serve them, and of cultivating too much land in cotton not well fertilized and not well cultivated. The cotton raised in Virginia is found to be of excellent quality, and there seems every inducement to continue and to extend this industry.

**POLITICAL.**—In July Mr. Massey announced himself as a candidate for Congressman-at-large, in opposition to Senator Mahone and the Readjusters, in a letter in which his position is thus defined:

For several years past, the settlement of the State debt, and other questions incidental to it, have absorbed so much of the attention of the people of Virginia, that they have given comparatively little attention to Federal affairs. These were not *political* questions. The most stalwart Democrats and the most stalwart Republicans divided and took directly opposite positions upon them. The men of each side were, no doubt, equally honest—each acting in accordance with his honest convictions of right. Neither Democrats nor Republicans were less Democrats or less Republicans because of their being either Readjusters or Funders.

The leaders of both the Readjuster party and the Funder party were Democrats; and each appealed to Republicans to co-operate with them in the settlement of the State debt and other questions of State policy, assuring them that by doing so they in nowise sacrificed their political affiliations or principles.

These questions, upon which both political parties were divided, are now settled, so far as legislation can settle them.

Thus, the questions which separated men of the same political party from, and arrayed them against, each other having been settled, no partition-wall or dividing line stands between them.

I need scarcely inform you, my fellow-citizens, that I first formulated and enunciated the principles of readjustment, and that I have stood firmly and unswervingly by those principles at all times, in all places, and under all circumstances, from an honest conviction of right and duty. These facts are well known to all.

I was, however, a Virginian and a Democrat before the question of readjustment ever arose, and my advocacy of readjustment never lessened my devotion to my State or changed my political principles.

When Senator Hill and others criticised so severely what they supposed would be the course of General Mahone in the Senate of the United States, before he had given a vote, I disapproved their course and censured them for it.

And when General Mahone repelled these attacks, declared he was a "better Democrat" than his assailants, and asserted his independence of caucus dictation, I applauded him for it.

I did not suppose it possible that he who had always boasted of his Democracy, and who had but a short time before sworn that the vote of Virginia should "never be cast for Garfield," had even then formed an alliance with the Republican party, and

would soon after be devising a plan for handing the whole State over to Arthur in exchange for the Federal patronage in Virginia.

Under the banner of liberalism and opposition to rings and cliques, he has inaugurated the most autocratic rule; displaying more intolerance of other men's rights of thought, speech, and action, and required more servile submission to his will and authority, than was ever before witnessed among any free people. Under the popular cry of equal rights for all the people, and opposition to monopolies, he so shaped legislation that, but for the sagacity, the patriotism, the honesty, and the independence of the noble "Big Four," equal rights would now be but an empty name, and the very term a mockery; and the aggregate power of all monopolies concentrated in his hands—a bit in each man's mouth, while he held the reins and the whip.

The four Senators, A. M. Lybrook, B. F. Williams, P. G. Hale, and S. H. Newberry, in an address to the people of the State, explained their course as follows:

We, the undersigned, members of the Virginia Senate, and of what was *once* the Readjuster party, claim that we discharged our whole duty, so far as we were permitted so to do, in the settlement of the public debt, in compliance with our pledges to our respective constituencies. Having done this, the main object of our trust was accomplished.

But we soon learned, from the acts of the caucus and the leaders of the party, that an honest settlement of the State debt upon the terms and according to our repeated promises to the people was not the real object of the self-constituted leaders of the party, but that the result of the November election was to be used to establish a dishonorable spoils system unknown in the political history of this State; that every right of the people was to be prostituted to the success of a dangerous centralized power in the hands of one man and his chosen friends; that to accomplish this purpose the courts were to be deprived of their co-ordinate authority, and made subservient to a central Executive and partisan Legislature; the common schools were to be converted into political agencies; the right of the people to elect their own officers was in a measure to be taken from them, and other heretofore unknown and dangerous measures were to be inaugurated. To accomplish these purposes, a degrading and tyrannical caucus system was enforced by rules degrading to those who were forced by the party lash to adopt it—insulting to their manhood, and a betrayal of the public trust confided to them by the people. The ultimate object of all this was to get control of the whole political power of the State, and hand it over to the daring leader of the party, to be utilized by him to advance his ambitious personal schemes; and it was all to be done quickly, and before the people could be warned of the danger. They, through their faithless representatives, were to be converted into a new political party, with new principles and doctrines, all for the special benefit of the leader and his friends. We, foreseeing the tendency of these measures, alarmed at the impending danger—refusing all offers of place or profit as the price of a betrayal of the trust confided in us—conscious of the rectitude of our motives—determined to use every effort to thwart these measures.

An address was issued by the other Readjuster members of the Legislature and the State officers, which denounced the four Senators as unfaithful to the pledges implied in their election, and claimed that the measures sought to be passed were proper and beneficial. Massey received the support of the Democrats, whose State Committee declared in his favor. The straightout Republicans placed in



nomination the Rev. John M. Dawson, colored.

The Readjuster candidate was John S. Wise. The Readjusters pronounced in favor of supporting the Administration of President Arthur. The candidates for district Congressmen were as follow :

DISTRICT.	Readjuster.	Democratic.
1.....	Robert M. Mayo.....	George T. Garrison.
2.....	Harry Libbey.....	R. C. Marshall.
3.....	John Ambler Smith.....	George D. Wise.
4.....	Benjamin S. Hooper.....	W. A. Reese.
5.....	William E. Sims.....	George C. Cabell.
6.....	J. Henry Rives.....	J. Randolph Tucker.
7.....	John Paul.....	Charles T. O'Ferrall.
8.....	Richard R. Farr.....	John S. Barbour.
9.....	Henry Bowen.....	S. H. Newberry.

In the Second District J. F. Dezendorf ran as a straightout Republican; and in the Ninth, Abram Fulkerson as an Independent Readjuster. Mr. Newberry ran as a Democrat, but without a regular nomination.

ELECTION RETURNS.—The election resulted in the choice of six Readjuster and four Democratic Congressmen, Readjusters being returned at large, and from the First, Second, Fourth,

Seventh and Ninth Districts; and Democrats from the Third, Fifth, Sixth, and Eighth Districts. The vote was as follows, excluding scattering :

	Readjuster.	Democratic.	
At large.....	99,992	94,184	4,842 (Dawson).
District 1.....	10,505	10,594	
" 2.....	13,226	10,282	8,114 (Dezendorf).
" 3.....	8,060	10,736	
" 4.....	14,764	4,552	
" 5.....	11,489	12,948	
" 6.....	10,862	12,765	
" 7.....	12,146	11,941	
" 8.....	9,084	14,256	
" 9.....	10,078	1,467	5,608 (Fulkerson).

In the First District, Gloucester County, and a precinct of Northampton County, which gave Garrison 71 majority, were thrown out for irregularities. Chesterfield County, in the Third District, giving 38 Readjuster majority, was also thrown out, but this did not affect the result. The vote on the constitutional amendment, abolishing the poll-tax as a prerequisite to voting, was 107,303 for, and 66,131 against; majority for the abolition, 41,172.

## W

WAITE, MORRISON REMICK, lawyer, and the present Chief-Justice of the Supreme Court of the United States, was born in Lyme, Conn., November 29, 1816. His ancestors came from England in early colonial times, and settled in Massachusetts, but removed to Lyme about the year 1677. One of the earliest, whose name has been preserved, was Thomas Waite, whose son Marvin was on the first electoral ticket of Connecticut, after the Revolution, and served nineteen terms in the General Assembly, and as Judge of the County Court for several years. Remick Waite, who married Susannah Matson, was a half-brother of Judge Marvin Waite. The eldest son of Remick, Henry Matson, was born in Lyme, February 9, 1787; graduated at Yale College in 1809. A lawyer of learning and ability, he was successively elected to both the lower and higher branches of the State Legislature. In 1834 he was chosen an Associate Justice of the Supreme Court of Connecticut, and in 1854 was appointed Chief Justice of that court, which office he held till he reached the age of seventy years, the limit prescribed by the State Constitution. In 1816 he married a daughter of Colonel Richard Selden, of Lyme, and grand-daughter of Colonel Samuel Selden, an officer of the Revolutionary Army.

Morrison R. Waite is the oldest of the eight children of Chief-Justice Henry Matson and Maria Selden Waite. He entered Yale College at the age of seventeen years, and graduated, with honor, in the class of 1837, with William M. Evarts, Edwards Pierrepont, and Professor

Benjamin Silliman, Jr. After graduating he began the study of law in his father's office, in Lyme. In October, 1838, he went to Ohio, and continued his studies in the office of Samuel M. Young, then a prominent attorney of Maumee City. On his admission to the bar in 1839 he formed a partnership with Mr. Young. In 1849 he was elected to represent the Maumee District in the Ohio Legislature. After the expiration of his term, in 1850, his firm opened an office in Toledo, of which Mr. Waite took charge, and was soon acknowledged as a leading counselor and advocate in Northwestern Ohio. One, who often met him as opposing counsel, said that "his assertion on any question of law was always accepted as indisputable." In 1852 Mr. Young removed to Toledo, and the firm of Young & Waite continued until Mr. Waite's youngest brother, Richard, came to the bar, when the brothers entered into a partnership, which lasted till the senior partner's elevation to the chief-justiceship.

Politically a Whig, until the disbandment of that party, since that time he has been a Republican. An active and influential member of his party, he never became recognized as a party leader, the conservative tendency of his mind leading him in opposition to radical political measures. This was shown during the war, in his support of the policy of President Lincoln, rather than the more summary measures advocated by some of the anti-slavery leaders. But to all the war measures of the Government he gave earnest and effective sup-

port, making himself especially useful in aiding the recruiting service of the army.

In 1862 he ran as an Independent Republican, in the Tenth Congressional District of Ohio; the call for the convention which nominated him being signed by Republicans and Democrats, who pledged themselves to "the maintenance of the Government and the determined prosecution of the war; to the putting down of the rebellion, and the restoration of the Union." The regular Republican Convention nominated James M. Ashley, and adopted a radical anti-slavery platform, demanding the confiscation of the property of leading rebels, and other extreme measures. Edwin Phelps was brought out as the regular Democratic candidate. Ashley was elected by a plurality of 1,127 votes, although in an actual minority of 4,105. A seat upon the bench of the Supreme Court of Ohio was tendered to Mr. Waite by Governor Brough, but he declined it.

His national reputation dates from his selection by President Grant, in November, 1871, as one of the three counsel to represent the United States before the Tribunal of Arbitration, at Geneva, Switzerland, his associates being William M. Evarts and Caleb Cushing. This appointment came to him unsought, he not even being aware that such a position was to be filled. He was in New York, closing up an important case, when the dispatch from the Secretary of State advising him of his appointment by the President reached him, being forwarded to him from Toledo. He immediately accepted this appointment, and left for his post of duty at Geneva early in the following month of December, where he performed the required service to the entire satisfaction of the Government and the country.

His already good reputation as an indefatigable and learned lawyer was greatly enhanced by the ability which characterized his labors in behalf of his country in this historical tribunal. His argument on the liability of the English Government for permitting the Confederate steamers to take supplies of coal in its ports, was regarded as an effort displaying great logical power and comprehensive grasp of international questions. On September 17, 1872, the arbitrators rendered their decision that Great Britain had failed in her duties as a neutral, in the cases of the Alabama, Florida, Shenandoah, and their tenders, and awarded to the United States the sum of \$15,500,000 in gold, which was promptly paid. He returned from Geneva in November, 1872, and resumed the practice of his profession in Toledo. In the same year the honorary degree of LL. D. was conferred upon him by his Alma Mater. In January of the year 1873, he was, on the motion of Caleb Cushing, admitted to practice in the United States Supreme Court. In the following April he was nominated by both political parties and unanimously elected a delegate to the Convention called to form a new Constitution for the State of Ohio, and

upon its assembling, in May, he was chosen its president.

The death of Chief-Justice Chase occurred May 7, 1873, creating a vacancy in the highest judicial office in the United States. After Attorney-General George H. Williams and Caleb Cushing had been successively nominated for this position and withdrawn, the President sent to the Senate the name of Morrison R. Waite, January 20, 1874. This appointment was also unsolicited by him; the Constitutional Convention over which he was presiding being then in session, a member advancing to offer congratulations found him ignorant of the fact of his nomination. His appointment was received with approval throughout the country, being alike acceptable to the Senate, the bar, and the people generally, irrespective of parties. He was confirmed as Chief-Justice of the United States by a vote which has seldom been equalled in its favorable character. The nomination was discussed about an hour, during which speeches were made by Senators Edmunds, Thurman, Sherman, and Sumner, whose speech was considered one of the most impressive he ever delivered in the Senate. Mr. Sherman spoke of Mr. Waite's high standing at home, saying, "Not a breath of suspicion or reproach had ever been cast upon him," and that he believed "not a man existed whose character was more spotless, or whose sense of justice and honor was more acute." Not a word was said in opposition to the nominee, and the vote, taken by yeas and nays, resulted in a unanimous confirmation by the Senate. Chief-Justice Waite took the oath of office March 4, 1874, and immediately entered upon the duties of his high position. An Associate Justice of the Supreme Bench, now retired, says of him: "From the day of his entrance into office as Chief-Justice of the Supreme Court, he has been indefatigable in the discharge of its great duties, patient, industrious, and able. His administrative ability is remarkable. None of his predecessors more steadily and wisely superintended the court, or more carefully observed all that is necessary to its working. Nothing under his administration has been neglected or overlooked. He has written many of the most important decisions of the court, too many to be particularized. Among the more recent of his opinions may be mentioned those delivered in the cases of *Antoni vs. Greenhow*, *Louisiana vs. Jumel*, and *Elliott vs. Wiltz*, each of them involving questions arising under the Constitution of the United States." The decision of the Chief-Justice in the Louisiana bond case will be found under the title *OBLIGATION OF CONTRACTS* on pages 653 and 654 of this volume.

Judge Waite was married September 21, 1840, to Amelia C. Warner, of Lyme, Conn. They have been for many years active members of the Protestant Episcopal Church, he having been frequently elected a delegate to her general conventions.



WEED, THURLOW, a widely-known American journalist and political leader, died at his residence in New York city, November 22, 1882, in his eighty-fifth year. He was born at Cairo, Greene County, N. Y., November 15, 1798. His father was a cartman in very poor circumstances, and he had therefore, in his early life, abundant experience of the struggles and hardships of poverty. His first occupation was as a blower and striker in a blacksmith-shop in Catskill, where his parents were then residing, and he was afterward for a short time cabin-boy and cook on river-sloops. His early ambition was to be connected with the printing business; and while living at Catskill he managed to pick up some little information about his desired calling, doing chores in the office of the "Recorder" of that place. It was not, however, until his fourteenth year, that he was enabled to carry out his desire of becoming a printer. From this time for a number of years he found employment as a compositor in different parts of the State. In 1815 he came to New York, where he was for a time employed in the printing-office of Van Winkle & Wiley, who published Cobbett's "Weekly Register," with the eccentric editor of which journal he became acquainted by carrying proof-sheets to him.

In 1819 he established at Norwich, Chenango County, a paper called "The Agriculturist," but after two years he removed to Manlius, where he started the "Onondaga County Republican." A year later, in 1822, he moved to Rochester, and entered the employ of the late Everard Peck. In 1824 the "Advertiser"—the first daily paper west of Albany—was started at Rochester, and shortly afterward the "Telegraph," of which Mr. Weed became owner and editor, was established in the same place. It was while occupied in editing this journal, that Lafayette visited the United States, and Mr. Weed accompanied him as a correspondent in his tour throughout the State. In 1826 the Anti-Masonic excitement arose, due to the abduction and alleged murder of William Morgan, who had published a book purporting to reveal the secrets of Masonry. Difficulties arising out of an editorial comment on this affair, which displeased many of the subscribers of the "Telegraph," induced Mr. Weed to withdraw from this journal, and to found shortly afterward the "Anti-Masonic Enquirer," which at once met with public favor, and gave its editor a leading place in party councils. On the Anti-Masonic issue Mr. Weed was twice elected to the Legislature, being in the Assembly at the same time that Mr. Seward was in the Senate.

His ability as a party manager recommended him to the leading men in political accord with him as the proper man to contend at Albany with what was known as the "Regency," whose political organ was the "Argus." Accordingly, in 1830 Mr. Weed established in that city the "Albany Evening Journal," which took a conspicuous part in the formation of the Whig, as

it afterward did in that of the Republican, party. During the thirty-five years in which he continued to manage it, it held a prominent and influential position in party journalism, and brought Mr. Weed into close and intimate relations with all of the leading men in political agreement with him, as well as with many with whom he was at times in political contention.

Mr. Weed's record as a political worker and party leader runs back to the very beginning of his journalistic career. The first political campaign in which he took a prominent part was the presidential conflict of 1824, which resulted in the election of John Quincy Adams. He succeeded in uniting the Adams and Clay factions, and was acknowledged by the prominent men of his party to have contributed more than any one else to the party's success in this campaign. He took a prominent part in the nomination of Harrison in 1836 and 1840, and of Clay in 1844, and was active in behalf of General Scott in 1852 and Fremont in 1856. In 1860 Mr. Seward was his choice, and he labored strenuously for his nomination; but, failing in this, he cordially supported Mr. Lincoln, whose re-election he heartily advocated in 1864. He supported the nomination of General Grant, and also his renomination in 1872. In the nominations for prominent positions in his own State, Mr. Weed's advice and influence were important elements. He advocated and worked for the nomination and election of Governors Seward, Fish, King, Hunt, Morgan, and Dix, whose administrations have been among the most successful of those in the history of the State.

Mr. Weed visited Europe several times, corresponding during his earlier trips with the "Albany Evening Journal." His first visit was made in 1843, the second in the latter part of 1851, and the third in 1861. The visit of the last year was one of national importance, as his mission was to place the struggle in which the North was then engaged in a favorable light before Europe, and ask the European governments to refrain from any intervention on behalf of the South. He was accompanied by Archbishop Hughes and Bishop Mellvaine. The letters written by Mr. Weed while on these visits, as well as a series written on a visit to the West Indies in 1844-'45, were collected and issued in a volume in 1866.

In 1867 Mr. Weed became the editor of the "Commercial Advertiser," in New York city, which position he was, however, compelled to give up in a little over a year on account of failing health. This was somewhat improved by a European trip in the summer of 1868, but not sufficiently to warrant him in undertaking regular and prolonged work. The winter of 1868-'69 was spent in South Carolina, and from then until his death, with the exception of several intervals of travel, he spent his time in New York, contributing occasionally to the periodicals, mainly "The Galaxy," and also

occupying himself in the preparation of his autobiography, which he left unfinished.

Mr. Weed was married in 1818 to Miss Catherine Ostrander, of Cooperstown, who died in 1858. He had four children—three daughters, two of whom are married, and a son, who died in 1851, at the age of thirty-one. He had also an adopted daughter, who died in 1855.

**WEST VIRGINIA.** The Governor of this State during the year was Jacob B. Jackson.

**ELECTIONS.**—The election in November was for the choice of four members of Congress, a Judge of the Supreme Court, and members of the State Legislature. Of the members of Congress, the Democrats elected three and the Republicans one. For Supreme Judge, Adam C. Snyder was elected by a majority of 3,221, in a total vote of 90,101. To the Senate of the Legislature eight Republicans and seventeen Democrats were elected; to the House, twenty-seven Republicans and thirty-eight Democrats.

**FINANCES.**—A summary of the fiscal year ending September 30, 1882, shows the following results:

Balance in Treasury, October 1, 1881 .....	\$256,800 52
Receipts from all sources during the year.....	842,563 53

Making a total of.....	\$1,098,864 85
The disbursements during the year ending September 30, 1882.....	797,612 06

Leaving a balance at the end of the year 1882 of.....	\$301,252 29
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The balance in the general Treasury is made up of the following funds:

State fund in Treasury October 1, 1882.....	\$13,698 32
The general school fund.....	252,760 84
The school fund.....	84,798 63

Total.....	\$301,252 29
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By the census of 1879 the population of the State was 442,014. In 1880 it increased to 618,443, an increase of nearly 40 per cent, yet the assessed value of the personal property in the State in 1871 was greater than in 1881 by more than \$3,000,000, and the assessed value of the land in 1881 was greater than in 1871 by about \$10,000,000—showing a net gain in real and personal property of about \$7,000,000, on \$136,000,000, or a little over 5 per cent in ten years.

These figures would seem to indicate that the large immigration to this State in the last ten years had added nothing to the wealth in personal prosperity.

This can not be true. The last census testifies to the large number of farms that have been opened and to the large increase of agricultural productions. In the mining districts there is also a large increase of production. Railroads have been built affording means of transportation to market—not only of minerals, but also of timber, which heretofore has been valueless. The subjects of taxation and their values to-day are greater than in any former years.

While the population has been increasing, the necessary expenses of government have

also increased. In 1871 the appropriation for criminal charges was \$24,000; in 1881 it was \$55,000.

In 1871 the appropriation for the insane was \$31,000; in 1881 there was appropriated for like purposes \$83,000. Other subjects of charge upon the general Treasury have increased in like proportion.

**STATE INSTITUTIONS.**—The number in the Insane Hospital during the year was 642. There were discharged during the year:

	Males.	Females.
Cured (white).....	30	25
Cured (colored).....	20	1
On bond (white).....	20	15
Died (white).....	29	25
Died (colored).....	8	8
Escaped.....	2	
Highest number during the year.....	642	
Lowest number during the year.....	581	
Cost per capita per week.....	\$2 13½	

The number in the Deaf and Dumb and Blind Asylum on October 1, 1881, was as follows:

Deaf-mutes.....	87
Blind.....	88

Total.....	120
In attendance during year, deaf-mutes.....	89
In attendance during year, blind.....	86

Total.....	125
Discharged, deaf-mutes.....	10
Discharged, blind.....	4

Total.....	14
Present at end of term, June, 1882, deaf-mutes.....	82
Present at end of term, June, 1882, blind.....	80

Total.....	112
Number of prisoners in the Penitentiary October 1, 1881.....	201
Received during the year.....	79
In prison during the year.....	208
Discharged during the year, expiration of term.....	78
Pardoned by the President and Governor.....	15
Sent to Insane Asylum.....	1
Died.....	1
In prison October 1, 1882.....	185

The board estimate the current expenses for the year ending September 30, 1883, as follow:

For subsistence, clothing, medical attendance, guards, etc., for year ending September 30, 1883, 200 prisoners at 46 1-10 per capita per day.....	\$83,650 00
Less earnings as follows, viz:	

From contractors for convict labor.....	\$19,500 00
From rents.....	150 00
From visitors.....	200 00
From boarding Federal prisoners.....	780 00
	\$20,680 00

Deficiency.....	\$18,070 00
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The summary of the schools is as follows:

Number of children enrolled for year 1882, between six and twelve years of age.....	216,598
Number of children enrolled between same ages for 1881.....	218,191

Increase for the year.....	8,407
Average daily attendance for the year.....	96,652

Increase over previous year.....	5,386
Total receipts from all sources for the teachers' and building fund, including balance on hand during the year.....	\$988,620 08

Increase over previous year.....	\$73,160 11
Total expenditures for all purposes during the year.....	\$865,878 41

Increase over previous year.....	\$106,358 16
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The law establishing the State Board of Health and regulating the practice of medicine and surgery, as amended and re-enacted, has



proved a wise act of legislation. It is admirably adapted to secure the protection of the lives, health, prosperity, and happiness of all classes of the people.

The number of registered physicians and surgeons to date of report is 1,041. Of these 958 are residents of the State, and the residue residents of adjoining States.

Besides the careful protection of the interests of the life and health of the inhabitants of the State, the board is charged with the duty of investigating the causes of diseases occurring among the domestic animals. The value of this provision of the law was witnessed in Brooke County, when what is known as the Southern cattle-fever made its appearance on several farms in that county. The prompt action of the State and county boards arrested the spread of the disease, and probably saved large sums of money to farmers of that locality, in the preservation of their stock from infection.

**LAND-TITLES.**—With regard to the West Virginia land-titles, and the various frauds practiced to induce unsuspecting persons to purchase land, Governor Jackson makes the following statement: "Complaints are frequently made to this department, of frauds being practiced upon persons, desiring to purchase lands in this State, by unscrupulous persons offering for sale in the Eastern cities lands, the title to which has been forfeited, sold as delinquent for taxes, or held under junior titles." He states also that "descriptions, abstracts, plates, seals, etc., etc.," relating to above a million of acres as located in eleven specified counties, and offered for sale "at ten cents per acre," have actually been manufactured in an Eastern city. In order to remedy, at least in part, the evil resulting from these frauds, which can not but most injuriously affect the reputation and material interests of West Virginia, the Governor suggests that all clerks who have to do with land-titles "should be inhibited from certifying the title to forfeited and delinquent lands, or giving abstracts of such titles, except where the same are to be filed as evidence in some pending suit."

Criminal life-insurance companies, familiarly known as "Graveyard" and "Death-Rattle" companies, because they take on themselves unusual risks, and thereby induce the policy-holder to attempts against the insured person's life, having been organized and chartered to transact business in neighboring States, Governor Jackson warns the Legislature to effectually prevent such companies, or their agents, from being admitted to do business in the State.

**LEGISLATION.**—The special session of the Legislature commenced on January 11th, and closed at the end of March. Within that time about two hundred and thirty acts were passed, of which almost all are of a local character. Among them were the following:

"An act making an appropriation for the

purpose of paying the costs of establishing and maintaining a quarantine by the Board of Health"; "An act apportioning representation in the Senate and House of Delegates of this State"; "An act for districting the State for Representatives in the Congress of the United States"; "An act fixing the maximum retail price of certain school-books in use in the schools of this State."

Near to the close of this session, the following communication was addressed to the Legislature, containing a resolution, adopted by the Land League of the city of Wheeling, at their meeting on March 19th:

*To the Honorable the Members of the Legislature of West Virginia.*

GENTLEMEN: The undersigned citizens of the city of Wheeling beg leave to state that, at a meeting of the Land League of said city, held on Sunday, March 19th, they were appointed a committee to lay before you the following resolution passed at that meeting:

*Resolved*, That the Legislature of this State, now in session, is respectfully requested to use its influence to secure for American citizens now confined in prisons in Ireland, by authority of the English Government, contrary to the spirit of public law, all the rights which, as American citizens, they are justly entitled to.

We have the honor to be, gentlemen, your obedient servants.

It was presented on March 26th to the Senate by one of its members, who at the same time offered for adoption the following joint resolution, which was passed by a unanimous vote:

*Resolved by the Legislature of West Virginia*, That the members of the Senate and House of Representatives representing this State in the Congress of the United States be and they are hereby respectfully requested to use such means and influence as may be in their power to secure the intervention of the Government of the United States for the release and protection of American citizens, confined in prison by authority of the Government of Great Britain.

**WISCONSIN. STATE GOVERNMENT.**—The State officers during the year were as follows: Governor, Jeremiah M. Rusk, Republican; Lieutenant-Governor, Samuel S. Fifield; Secretary of State, Ernst G. Timme; Treasurer, E. C. McFetridge; Attorney-General, Leander F. Frisby; Adjutant-General, C. P. Chapinan; Superintendent of Public Schools, Robert Graham; Insurance Commissioner, P. L. Spooner, Jr.; Railroad Commissioner, Nils P. Hangen. Judiciary, Supreme Court: Chief-Justice, Orsamus Cole; Associate-Justices, William P. Lyon, Harlow S. Orton, David Taylor, and John B. Cassoday.

**LEGISLATURE.**—The Legislature convened on the second Wednesday of January, and adjourned on the 31st of March, after a session of eighty days. The average for the past thirteen years has been sixty-seven.

There were introduced in the Senate 444 bills, of which 130 became laws; 32 joint resolutions were also introduced in this body; 28 resolutions; 6 memorials to Congress, and 51 memorials and petitions. In the Assembly, 484 bills were introduced, 200 of them became

laws; 33 joint resolutions; 61 resolutions; 438 memorials and petitions, and 5 memorials to Congress.

The important measures passed at this session may be briefly summarized as follow:

Six new cities were incorporated, as follow: Baraboo, Port Washington, Monroe, Menomonie, Stoughton, and Neillsville.

The Insurance Commissioner was given discretionary power in the issuance of licenses exempting co-operative life companies from the provisions of the general insurance laws of the State; heretofore, a special act of the Legislature was required. Another act passed, provides for the revocation by the Commissioner of the license of any company which advertises to do a different class of business from what it really does.

Continuous lines of railway, of which it is desired to make through trunk-lines, are permitted to consolidate for that purpose. The St. Croix land grant was transferred from the Chicago, Portage and Superior Railway Company to the St. Paul and Omaha line, the latter agreeing to pay \$75,000 toward meeting the claims of laborers on the former line, and also to pay all expenses in the matter of settlement.

A bill was passed providing that the State militia shall hold annual encampments, camp-equipage to be purchased by the State, and the men to be paid one dollar a day in camp for rations; the State is to furnish transportation to and from encampments; armories owned by companies are exempted from taxation; battalions are to consist of from three to eight companies, and regiments of eight or more; the maximum number of men to be taken into camp is seventy-five for each company; the uniform fund is made payable on inspection returns, instead of on encampment returns. The number of authorized companies in the State was increased from thirty to thirty-five.

Some changes were made in the school code. The time for annual school-meetings in towns was fixed for the first Monday in June, the present time being elective and irregular. The compulsory education law was amended so as to have school-boards sit and receive reports of attendance and truancy from the parents, instead of going around and hunting up the facts, as now. The benefits of the free high-school act were extended for five years more, they having now been in operation for five years past.

The seduction of females under sixteen years of age was made a penitentiary offense, with maximum imprisonment fixed at twenty years. The sale or use of toy-pistols and toy fire-arms generally was prohibited. So also was the importation into the State, of diseased swine and sheep. Severe punishment is fixed for the criminal abuse of children, by parents or guardians; also for the abandonment of children by their father.

The sale of trout from the State fish-hatcheries is prohibited. Any person who has had an uninterrupted practice within this State for twenty years, as a physician or surgeon, is authorized to serve without a diploma. Stringent regulations were adopted regarding the practice of pharmacy. The earnings of married laborers are exempt from execution for ninety days preceding the filing of suit, or, in lieu thereof, \$500 worth of property. Logs, lumber, and telegraph-poles belonging to non-residents, are hereafter to be taxed. Telegraph companies are to be taxed as follows: One dollar per mile for the first wire, fifty cents for the second, twenty-five for the third, and twenty for the fourth.

A proposed constitutional amendment, relative to the registry of voters, intended to meet the objections of the Supreme Court to the old law, was agreed to, and will be put to the popular vote next fall.

It was decided that the first biennial session shall be held on the second Wednesday of January, 1889.

Congress was memorialized to improve the Mississippi and its tributaries; to build a harbor of refuge on the east shore of Lake Pepin; to improve the Sturgeon Bay Ship-Canal; to adopt Pendleton's Civil-Service Reform Bill; to suppress polygamy, and to settle the claims of this State for certain tracts of swamp and overflowed lands.

A State tax of half a million dollars was ordered to be levied for the year.

Acts were also passed reapportioning the State for legislative purposes and for the election of Congressmen, and organizing Price County for judicial purposes. The following is the Congressional Apportionment Act:

First District, the counties of Jefferson, Kenosha, Racine, Rock, and Walworth.

Second District, the counties of Dodge, Fond du Lac, Washington, and Waukesha.

Third District, the counties of Dane, Grant, Green, Iowa, and Lafayette.

Fourth District, the county of Milwaukee.

Fifth District, the counties of Brown, Calumet, Kewaunee, Manitowoc, Ozaukee, and Sheboygan.

Sixth District, the counties of Adams, Columbia, Green Lake, Marquette, Outagamie, Waushara, and Winnebago.

Seventh District, the counties of Crawford, Juneau, La Crosse, Richland, Sauk, Vernon, and Monroe.

Eighth District, the counties of Bayfield, Barron, Buffalo, Burnett, Clark, Douglas, Dunn, Eau Claire, Jackson, Pepin, Pierce, Polk, St. Croix, and Trempealeau.

Ninth District, the counties of Ashland, Chippewa, Door, Florence, Langlade, Lincoln, Marathon, Marinette, Oconto, Price, Portage, Shawano, Taylor, Waupaca, and Wood.

The aggregate of appropriations made at this session was \$675,254.44.

The direct appropriations in 1881 were \$282,081.38; in 1880, they amounted to \$418,953.05; in 1879, to \$299,177.77; and at the regular session of 1878, to about \$339,000.

The causes for the unusually large appropriation this year are several. The principal of



these is the enlargement of the Capitol, which alone calls for \$200,000; the deficiency in the State institutions and the appropriation for the Industrial School for Girls are also important items which bring up the aggregate.

**FINANCES.**—The financial condition of the State is very satisfactory. The cash in the Treasury on the 30th day of September, 1881, belonging to the general fund, was \$287,953.32; the receipts of this fund for the fiscal year were \$1,263,074.90, and the disbursements were \$1,186,807.54, and the cash in the Treasury, September 30, 1882, was \$364,220.68.

The receipts of the trust funds during the fiscal year were \$1,060,954.31; the cash in the Treasury, September 30, 1881, was \$548,346.88; the disbursements from the trust funds during the fiscal year were \$1,446,888.21, and the cash in the Treasury on the 30th day of September, 1882, was \$162,412.98.

The receipts during the year for the school fund are given at \$326,159.60, of which amount \$130,000 was for United States bonds which had been called in during the year. The disbursements from this fund are reported at \$470,961.12, all of which, except the sum of \$337.62 refunded for overpayments, is invested according to law in interest-bearing securities. The total amount of school fund now at interest is \$2,805,278.23, and the cash balance belonging to the fund is \$7,767.95. The school-fund income during the year amounted to \$197,333.30, of which amount the sum of \$185,166.42 was apportioned to the different counties for school purposes.

There was paid during the year the sum of \$24,483.81 to the University fund, nearly all of which was in payment of interest-bearing securities falling due; and there was invested of this fund during the year, in United States bonds, the sum of \$52,862.50. At the end of the fiscal year there was of this fund \$228,438.83, all of which was at interest save \$2,966.39 cash on hand.

The Agricultural College fund, which now inures to the benefit of the university, amounted, on the 30th day of September, 1882, to \$279,689.84, of which \$274,385.37 was bearing interest.

The Normal-School fund, on the 30th day of September, 1882, amounted to \$1,165,041.20, all of which save \$17,969.62 was invested in interest-bearing securities. The income from the fund during the year was \$85,594.98, all of which was disbursed for the benefit of the normal schools.

The receipts of the drainage fund for the year were \$85,012.93, almost entirely derived from the sale of lands, and the disbursements were \$48,542.59.

The receipts of the year ending September 30th aggregated \$2,324,029.21, and the disbursements, \$2,633,695.75 — a deficiency of \$309,666.54. But there was a balance in the Treasury, September 30, 1881, of \$836,300.20, covering the present deficit, and leaving a bal-

ance in the Treasury, September 30, 1882, of \$526,633.26. The Secretary of State estimates that the expenditures during the years beginning January 1, 1884, and January 1, 1885, will be \$1,041,720.88, and the revenues, \$941,720.88.

The bonded debt of the State, created in 1861-'63, has now all been paid or converted into certificates of indebtedness to the trust funds, except \$2,000, \$1,000 of which falls due July 1, 1886; the other \$1,000, July 1, 1888. The distribution of the debt, on the 30th of September, was as follows:

War bonds outstanding .....	\$2,000 00
Certificates of indebtedness, school fund. ....	1,562,700 00
Certificates of indebtedness, Normal-School fund .....	515,700 00
Certificates of indebtedness, University fund ..	111,000 00
Certificates of indebtedness, Agricultural College fund .....	60,000 00
Currency certificates .....	57 00
Total .....	\$2,252,057 00

The total State-tax levy for 1882 was \$710,220.88. Following are interesting items from the receipts of the fiscal year: Railroad licenses, \$586,328.58; plank-road licenses, \$107.16; telegraph licenses, \$3,417.60; fire-insurance licenses, \$40,727.26; life-insurance licenses, \$10,994.26—total from corporations, \$641,574.26; hawkers and peddlers paid in \$14,086.36.

Under the head of assessment of property, there are in the State 355,901 horses, 1,004,064 neat-cattle, 7,574 mules and asses, 1,258,131 sheep, 782,617 swine, 212,944 wagons and carriages, 26,223 watches, 23,878 musical instruments, and 32,083 shares of bank-stock, \$27,203,123 worth of merchants and manufacturers' stock, and \$28,956,730 worth of all other property, making a total of \$100,507,690 worth of personal property in the State subject to taxation. There are 27,142,837 acres of taxable lands in the State. The total valuation of the State, as returned by town assessors, is \$446,760,585.

Indebtedness of towns, cities, villages, and school districts: Railroad aid, \$2,642,609.85; bridges, \$117,417; other purposes, \$2,862,771.34; interest unpaid, \$608,008.10; school districts, \$179,227.23; total, \$6,410,133.52. Indebtedness of counties: Railroad aid, \$930,212.29; interest unpaid, \$52,341; all other purposes, \$466,792.06; total, \$1,769,605.35.

The account between the State of Wisconsin and the United States for the direct war-tax, as shown by the statement of the First Comptroller of the United States Treasury, stands as follows: Amount due the United States, September 30, 1881, \$207,685.16. During the year there was placed to the credit of the State, \$156,539.59, leaving a balance due the United States of \$51,145.57. There are now claims before the departments for adjustment, which will be allowed and credited to the State, amounting to \$20,000.

The sale of public lands during the fiscal year was 218,395.84 acres, at prices varying

from fifty cents to three dollars per acre. The report of the commissioners shows that there are now on hand nearly 1,000,000 acres of public lands; that there are nearly 240,000 acres not yet put in the market; and that there were selected during the year 67,000 acres, for which the State will soon receive patents.

**EDUCATION.**—The attendance at schools of pupils between the ages of seven and fifteen years is 87 per cent of the whole number in the State between those ages. The total valuation of school property, including buildings, sites, libraries, etc., is \$5,614,938. The total amount expended for public and private schools during the school year was \$2,577,402.

There were 948 students in attendance at the various normal schools during the year. There were 31 graduated and 61 licensed, and there are now employed in the public schools of the State 330 graduates of the normal schools, and 1,053 undergraduates. Sixty institutes were held in 51 counties, with a total attendance of 3,882, and at an expense of \$6,433. The regents report the schools in a prosperous condition, and earnestly endeavoring to perform the work assigned to them.

The annual catalogue of the State University for 1882-'83 reports the total number of students in the institution at 367.

The total receipts of the university for the fiscal year were \$98,932.37; total disbursements, \$92,736.90. The balance September 30, 1881, was \$7,604.71; the balance September 30, 1882, was \$13,800.18.

**PUBLIC INSTITUTIONS.**—At the close of the fiscal year there were confined in the State-Prison, at Waupun, 348 persons. The total cost of maintaining the prison for the year was \$47,751.33, of which the prisoners' earnings furnished \$31,129.30; receipts from visitors were \$193.50, making the net cost to the State of supporting the institution, \$16,428.53.

The number of boys in attendance at the State Industrial School, at Waukesha, on September 30th, was 299; average attendance during the year, 321. There were admitted during the year 95 boys, discharged 160.

The whole number of patients who have received treatment at the State Hospital for the Insane, at Mendota, during the fiscal year, was 656. The number discharged recovered was 49; improved, 59; unimproved, 56. The total cost of this hospital for the year was \$95,648.37, being a weekly cost per capita of \$3.92. At the commencement of the year the Northern Hospital for the Insane had under treatment 512 patients; admitted during the year, 225; total, 737. Of these there were discharged recovered, 64; improved, 26; unimproved, 30. The number present at the close of the year was 564; average for the year, 529. The cost of maintaining this hospital was \$98,160.02, which is equal to a weekly cost per capita of \$3.57.

The whole number of pupils enrolled at the Institution for the Education of the Deaf and

Dumb, at Delavan, during the year, was 244; of these there were present September 30, 1882, 182; average attendance during the year, 176. The total cost of supporting this institution for the year was \$34,375.94, which amount represents a weekly cost per capita of \$3.86.

At the Institution for the Education of the Blind, at Janesville, there were enrolled during the year a total of 82 pupils, of whom there were present on the last day of the fiscal year, 57; average attendance for the year, 63. The total cost of supporting this institution was \$16,726.17, equal to a weekly cost per capita of \$5.11.

**INSURANCE.**—The valuable report of the Insurance Commissioner shows that for the year ending December 31, 1881, the fire-insurance companies had:

Risks written .....	\$165,386,642
Premiums received .....	1,997,248
Losses paid .....	925,798

The life-insurance companies doing business in the State reported for the year ending March 1, 1882:

Policies in force .....	\$32,705,956
Premiums received .....	878,143
Losses paid .....	565,743

**RAILROADS.**—The year was one of more than usual activity in railroad enterprise, both in the volume of business and in the building of new roads.

The Wisconsin railroad earnings from June 30, 1881, to June 30, 1882, were \$18,765,428.32, an increase of \$3,287,255.71 for the year; being an average per mile of \$5,639.16, an increase of earnings per mile of \$824.25. The total cost of operating the railroads of the State was \$10,276,746.45, leaving as net earnings \$8,488,681.87; the operating expenses per mile were \$3,088.24, and the net earnings per mile of operated road were \$2,550.91. The total number of passengers carried upon the roads of the State was 3,611,973; equal to 162,231,759 passengers carried one mile, at an average cost per mile of a trifle less than 2'83 cents. There were 5,499,321 tons of freight carried; an equal of 813,414,402 tons carried one mile; and the average rate per mile on each ton carried was a little less than 1'61 cents, which is a decrease of '07 of a cent per mile on each ton of freight carried.

The Railroad-Commissioner system in Wisconsin has been a success, and, while the complaints have not been numerous, they have always received prompt attention. It is stated that, during a long term of years, not a single case of litigation has grown out of a complaint lodged with the Commissioner, but in every instance an amicable adjustment has been had, satisfactory to all parties concerned. It has been found much easier and better to adjust than to litigate, and in this way a better spirit has been developed and maintained between the people and the railroad corporations.

**IMMIGRATION.**—By a reference to the tables



of the report of the Board of Immigration, it will be seen that, of the 57,952 immigrants arriving in Milwaukee during the calendar year, 31,758 found homes in the State; and it is safe to say that fully 10,000 more went into Wisconsin, direct from Chicago, without passing through Milwaukee. The great majority of these new-comers settled in the northern part of the State. They were chiefly small farmers and farm-laborers from Germany, Norway, and Sweden, and will become important factors in developing the agricultural and other natural resources of Northern Wisconsin.

**ELECTION RETURNS.**—In November, Congressmen and members of the Legislature were chosen, and a vote was taken on two proposed amendments to the Constitution. Republicans were elected in the sixth, eighth, and ninth congressional districts, and Democrats in the other six. The following were the successful candidates: First District, John Winans; Second District, Daniel H. Sumner; Third District, Burr W. Jones; Fourth District, Peter V. Deuster; Fifth District, Joseph Rankin; Sixth District, Richard Guenther; Seventh District, Guibert M. Woodward; Eighth District, William T. Price; Ninth District, Isaac Stephenson. The vote was as follows:

**FIRST CONGRESSIONAL DISTRICT.**

Williams, Republican	11,853
Winans, Democrat	12,807
Blackman, Prohibitionist	2,207
Utley, Greenbacker	10
Scattering	1

Total vote of district	86,873
Winans's plurality	454

**SECOND CONGRESSIONAL DISTRICT.**

Rowell, Republican	8,870
Sumner, Democrat	10,671
Chapin, Prohibitionist	1,006
Merrill, Greenbacker	627
Scattering	8

Total vote of district	21,178
Sumner's plurality	1,801

**THIRD CONGRESSIONAL DISTRICT.**

Keyes, Republican	3,791
Hazelton, Republican	7,924
Jones, Democrat	18,035
Hastings, Prohibitionist	3,152
Scattering	2

Total vote of district	28,845
Jones's plurality over Hazelton	8,111
Jones's plurality over Keyes	9,244

**FOURTH CONGRESSIONAL DISTRICT.**

Winkler, Republican	8,320
Deuster, Democrat	9,688
Goodwin, Trades' Assembly	1,922
Scattering	1

Total vote of district	19,931
Deuster's plurality	1,368

**FIFTH CONGRESSIONAL DISTRICT.**

Howland, Republican	6,108
Rankin, Democrat	12,928
Wing, Prohibitionist	813
Thomas, Greenbacker	764
Scattering	16

Total vote of district	20,694
Rankin's plurality	6,825

**SIXTH CONGRESSIONAL DISTRICT.**

Guenther, Republican	10,808
Haben, Democrat	9,265
Kanouse, Prohibition	3,275
Stewart, Greenbacker	496
Scattering	5

Total vote of district	23,344
Guenther's plurality	1,088

**SEVENTH CONGRESSIONAL DISTRICT.**

Buttt, Republican	10,604
Woodward, Democrat	14,908
Parker, Prohibition	1,887
May, Greenbacker	860
Scattering	4

Total vote of district	24,768
Woodward's plurality	1,304

**EIGHTH CONGRESSIONAL DISTRICT.**

Price, Republican	14,059
Bailey, Democrat	11,315
Scattering	18

Total vote of district	25,392
Price's plurality	2,744

**NINTH CONGRESSIONAL DISTRICT.**

Stephenson, Republican	12,774
Park, Democrat	12,518
Woodmansea, Prohibitionist	1,460
Meehan, Greenbacker	199
Scattering	5

Total vote of district	26,956
Stephenson's plurality	256

**RECAPITULATION.**

Republican vote in the State	94,606
Democratic vote in the State	103,680
Prohibition vote in the State	18,800
Greenback vote in the State	2,496
Miscellaneous	2,392

Total vote of the State	216,924
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The vote in favor of the registry amendment was 36,223; against, 5,347; in favor of biennial sessions, 60,091; against, 8,089.

The Legislature to meet in 1883 will have 18 Republicans and 15 Democrats in the Senate, and in the House 53 Democrats, 42 Republicans, and 5 Independents.

**WOLSELEY, LORD**, formerly Sir Garnet Joseph Wolseley, an English general, born June 4, 1833, at the seat of his mother's family, near Dublin. His father was an officer, of the rank of major. The family had removed to Ireland from Staffordshire. Sir Garnet Wolseley was educated at a private school. He entered the army, with the rank of an ensign, in 1852. His first service was in the Burmese War of 1852-'53. In the Crimean War he was employed as an engineer in the trenches from December, 1854, till the capture of Sebastopol. He was severely wounded in a sortie, and for his bravery on different occasions was made a knight of the Legion of Honor. In the Indian campaigns of 1857-'59 he served with distinction, and received the brevet rank of lieutenant-colonel. In the Chinese War of 1860, employed on the staff of the quarter-master-general, he was present at all the engagements of the campaign. In 1870 he commanded the expedition sent from Canada to the Red River to suppress the insurrectionary government set up at Fort Garry, for which service he was knighted. During the Ashan-

tee War of 1873-'74 he was commander-in-chief, and for his success in that campaign was promoted to be major-general and received the thanks of Parliament. In 1874 he went to Natal to administer the government of the colony. The following year he acted as inspector-general of the auxiliary forces, and in November, 1876, was appointed a member of the Council of India. In 1878 he was selected to organize the government of Cyprus as high commissioner and commander-in-chief. In June, 1879, he returned to Natal, arriving at the close of the Zooloo War. As Governor and High Commissioner of Natal and the Transvaal he took charge of the work of organizing a government in the conquered Zoolooland, and conducted the subsequent campaign against Secocoeni. He returned to England in May, 1880, where he filled the post of quartermas-

ter-general, and, in April, 1882, succeeded Sir Henry Ellice as adjutant-general. When it was determined to send an expeditionary force to Egypt against the army collected by Arabi Pasha, Sir Garnet Wolseley, as the most successful and distinguished general in the British army, was appointed to conduct the campaign. His strategical plans were not interfered with by the civil authorities, and were so well laid that the war was terminated and the large Egyptian army dispersed before the operations were thought to be well commenced. For this last and greatest of his many achievements, Sir Garnet was raised to the peerage. He is the author of several works, including a "Narrative of the War with China" and a soldiers' manual, and a frequent contributor to the magazines. In 1867 he was married to a Miss Erskine.



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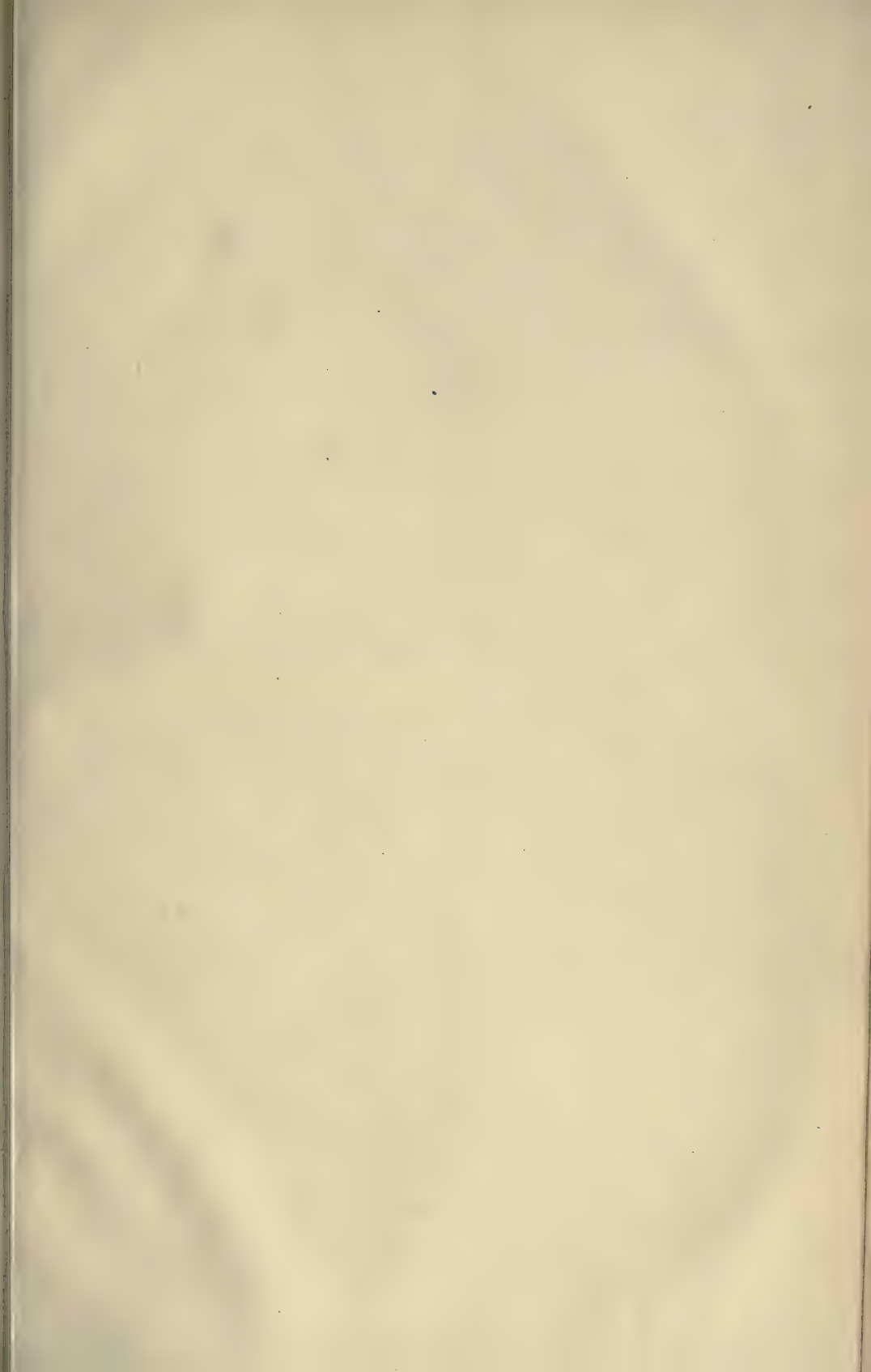
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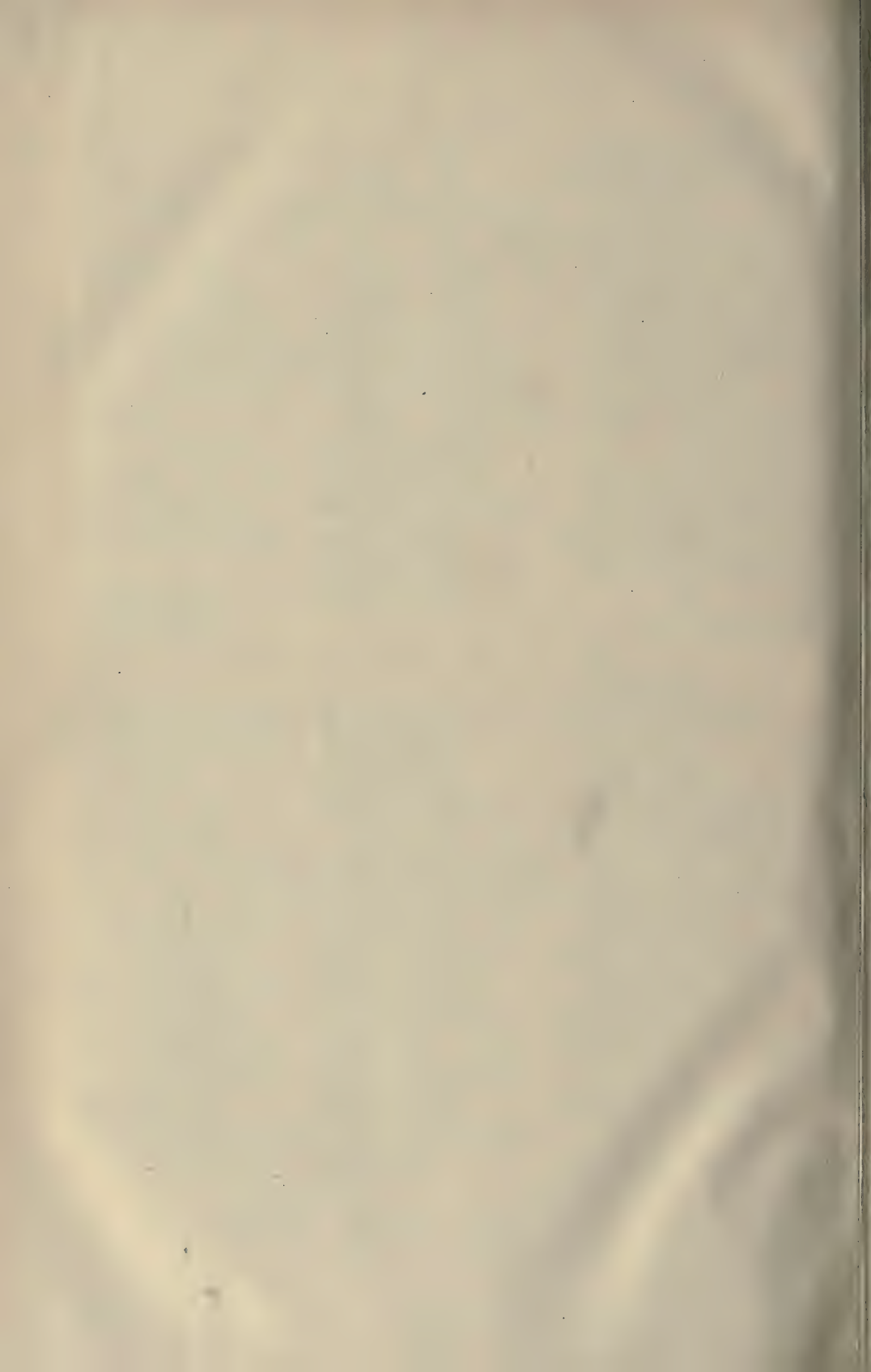
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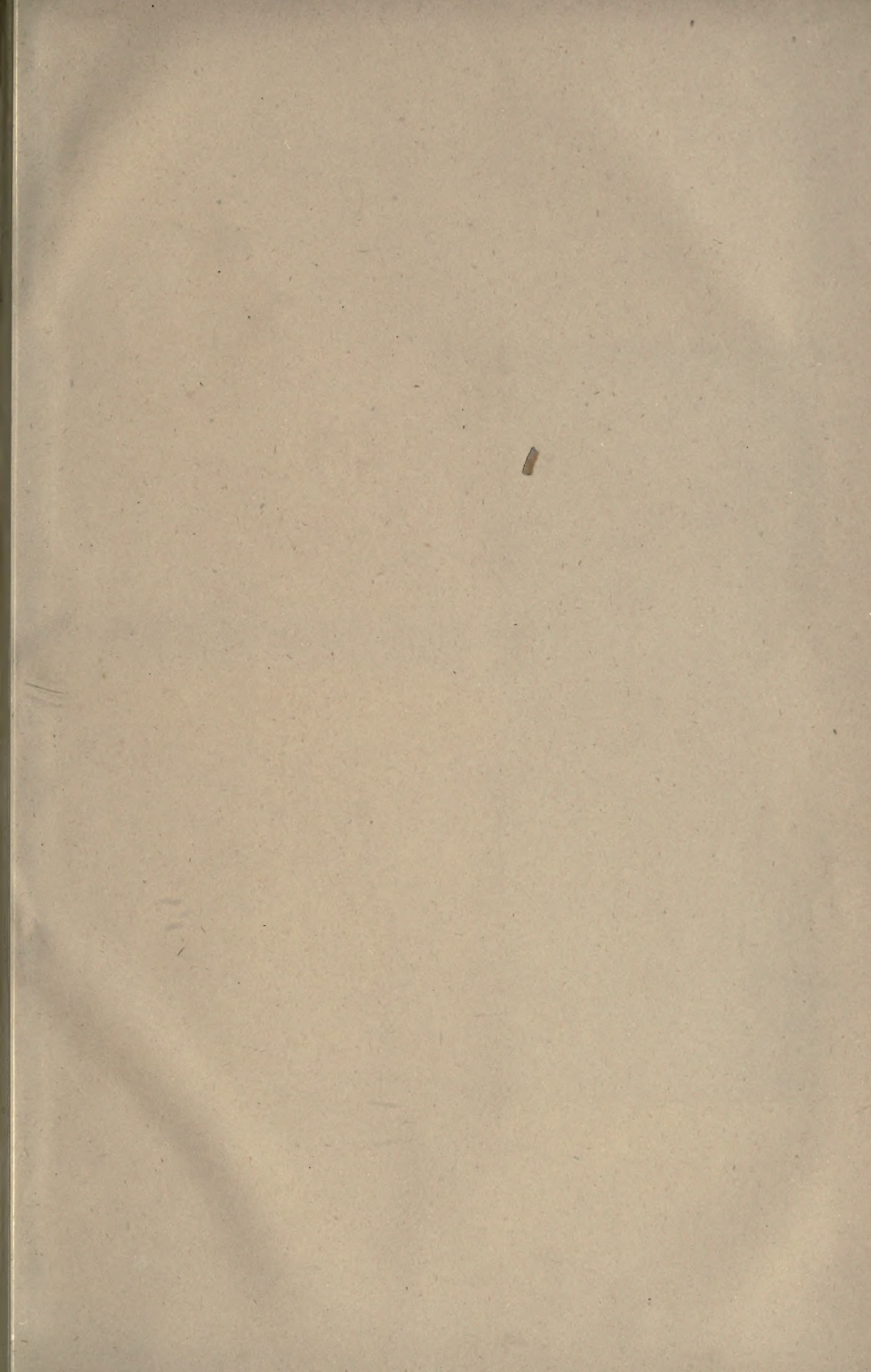
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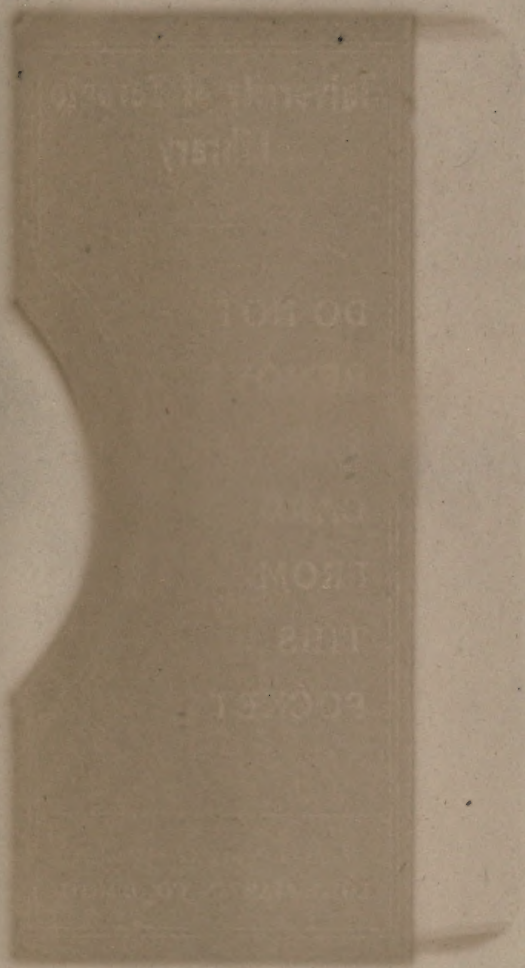














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